

INDEX OF AUTHORS' NAMES.

ABSTRACTS, 1924.

Anonymous.

Geber (Jabir ibn Hayyan), ii, 163.
determination of platinum and palladium in alloys, ii, 427.
quantum theory of band spectra, ii, 433.

A.

Aas, F. See *H. Goldschmidt*.

Abbott, W. E. See *H. G. Becker*.

Abderhalden, E., partial decomposition of proteins, i, 227.

the composition of spinning silk, i, 232.

remarks on papers of W. R. Hess and K. Rohr, "The action of thermal treatment of dry yeast, etc., and avian beriberi," and of Roelli, "The activation of *in vitro* respiration by muscle juice, etc.," i, 789.

products of the catalytic degradation of the feathers of the goose; remarks on W. S. Ssadikov and N. D. Zelinski's work, i, 1150.

influence of culture of yeast on galactose on its power of fermenting this carbohydrate, i, 1265.

Abderhalden, E., and *K. Goto*, the action of the enzymes of the gastrointestinal tract on diketopiperazine, i, 351.

Abderhalden, E., and *E. Klarmann*, preparation of compounds of diketopiperazines with amino-acids and polypeptides, i, 877, 1345.

Abderhalden, E., *E. Klarmann*, and *E. Schwab*, conversion of diketopiperazines into the corresponding piperazines, i, 876.

Abderhalden, E., and *E. Komm*, gradual decomposition of proteins; partial hydrolysis of keratin (hog bristles), i, 343.

structure of the protein molecule, i, 890, 891.

formation of diketopiperazines from polypeptides, i, 1346.

anhydride structure of proteins, i, 1361.

Abderhalden, E., and *A. Moschini*, further studies on the enzymic degradation of polypeptides composed of amino-acids not yet found among the degradation products of the proteins, i, 351.

Abderhalden, E., and *E. Schwab*, influence of acids and alkalis on amino-acids, i, 948.

structure of the protein molecule, i, 1345.

anhydride structure of silk fibroin, i, 1361.

Abderhalden, E., and *H. Sichel*, the resolution of *dl*-tyrosine into its two optically active components, i, 173.

mixed crystals, consisting of 2 mols. of glycine, or 2 mols. of alanine, or 1 mol. of glycine and 1 mol. of alanine, combined with 1 mol. of hydrochloric acid, i, 838.

isolation from casein of an amino-acid of the indole group with the composition $C_{11}H_{14}O_3N_2$, i, 1101.

Abderhalden, E., and *W. Stix*, the action of enzyme solutions on 3:5-di-iodo-*L*-tyrosine and glycy-3:5-di-iodo-*L*-tyrosine, i, 351.

structure of proteins, i, 437.

Abderhalden, E., and *E. Wertheimer*, autoxidations. I. Autoxidation of cysteine and poisoning by hydrocyanic acid, i, 11.

autoxidations. II. The transformation of cysteine into cystine, i, 11.

autoxidations. III., i, 11.

further studies on autoxidations and oxido-reduction processes. V., i, 239.

Abe, K. See *Y. Murayama*.

Abel, E., theory of thermodynamical phase boundary potentials, ii, 838.

Abel, E., and *A. Fürth*, kinetics of the formation of iodine from iodide and periodate, ii, 165.

kinetics of the reduction of periodate by arsenious acid, ii, 166.

Abel, J. J., and *E. M. K. Gelling*, properties of the constituents of Witte's peptone, i, 797.

- Abel, J. J., C. A. Rouiller, and E. M. K. Geiling**, the oxytocic-pressor-diuretic principle of the infundibular portion of the pituitary gland i, 240.
- Abelin, J.** See **S. Nakahayashi**.
- Abelmann, A.** See **L. Rosenthaler**.
- Abelous, J. B., and L. C. Soula**, cholesterogenic function of the spleen, i, 1013.
- Abelsdorff, R.** See **A. Schönberg**.
- Abouchy, F.** See **J. Piccard**.
- Abraham, A.** See **G. Embden**.
- Acél, D., and L. Lorber**, mechanism of hæmolysis in hypertonic salt solutions, i, 1127.
- Ackerman, I.** See **G. T. Morgan**.
- Ackermann, D.**, the extractives of *Mytilus edulis*, i, 348.
- Ackermann, D., F. Holtz, and F. Kutscher**, the extractives of *Eledone moschata*, i, 348.
- Ackermann, D., F. Holtz, and H. Reinwein**, the extractives of *Actinia equina*, i, 243.
the extractives of *Holothuria tubulosa*, i, 348.
actinine, i, 978.
- Ackermann, W.** See **E. Heuser**.
- Acklin, O.**, the rôle of bacteria in the "lactic acid fermentation of dextrose by peptone." III. and IV., i, 124.
- Adachi, A.**, uric acid and allantoin metabolism in avitaminosis, i, 245.
- Adair, G. S.** See **A. V. Bock, and J. L. Stoddard**.
- Adam, G.** See **R. Stollé**.
- Adam, H. R.**, preparation of gold crystals, ii, 619.
- Adams, R., and I. Levine**, simplification of the Gattermann synthesis of hydroxy-aldehydes, i, 51.
- Adams, R., and E. Montgomery**, simplification of the Gattermann synthesis of aromatic aldehydes. II., i, 860.
- Adams, R., A. W. Sloan, and B. S. Taylor**, aryl-1:3-benzodioxans (aryl-methylenesaligenins), i, 67.
- Adams, R.** See also **W. W. Bauer, W. R. Brode, W. H. Carothers, J. H. Gardner, G. D. Graves, R. A. Jacobson, W. E. Kaufmann, S. M. McKivain, C. R. Noller, C. W. Rodewald, R. L. Shriner, C. G. Tomecko, and E. H. Volwiler**.
- Addenbrooke, G. L.**, non-metallic elements; connexions between their dielectric constants and other physical properties, ii, 441.
- Adinolfi, E.**, Hall effect with bismuth in weak fields, ii, 716.
- Adkins, H., and W. A. Lazier**, organic reactions at the surfaces of dehydrogenating catalysts, i, 1278.
- Adkins, H., and B. H. Nissen**, the causation of organic reactions by alumina, and theories of catalysis, ii, 159.
- Adkins, H., E. F. Steinbring, and (Miss) E. Pickering**, diphenols from resorcinol and substituted diphenic anhydrides; structure of certain diphenyl derivatives, i, 1198.
- Adkins, H.** See also **W. C. Child, F. Bischoff, and W. A. Lazier**.
- Adler, A.**, fluorescent oxidation products of bilirubin and their importance as sources of error in the detection of urobilin, ii, 280.
- Adler, O.**, preparation of melanins containing sulphur, i, 1173.
- Adlersberg, D.**, acetonuria and acidosis, i, 244.
- Adolf, M.**, physical chemistry of the globulins. II. Acid globulins, i, 101.
physical chemistry of the globulins. III. Globulin salts, i, 101.
physical chemistry of the globulins. IV. Migration velocity of globulin ions, ii, 728.
physical chemistry of the globulins. V. Compounds of globulin with salts of tervalent ions, ii, 831.
- Adolf, M., and W. Pauli**, general colloid chemistry. VIII. Analysis and constitution of colloidal gold. II., ii, 311.
- Adowa, A. N.**, enzymes of *Utricularia vulgaris*. I., i, 1147.
- Adowa, A. N.** See also **I. A. Smorodincev**.
- Äckerle, E.** See **J. Schmidt**.
- Aeschlimann, J. A., and N. P. McClelland**, organic compounds of arsenic. I. Derivatives of *o*-benzarsinic acid, i, 1358.
- Agafonoff, V., and V. Vernadski**, product of the dehydration of kaolin, ii, 341.
- Ahlberg, R.**, stereoisomerism and steric transformations among α -thio- and α -sulpho-di[alkyl]carboxylic acids, i, 832.
- Ahmad, N.**, absorption of hard γ -rays by elements, ii, 440.
- Ahmad, N., and E. C. Stoner**, absorption and scattering of γ rays, ii, 582.
- Ahrndts, T.** See **R. Fricke**.
- Aiello, G.**, non-coagulable nitrogen of blood, and muscular work, i, 1125.
- Aihara, K.** See **J. Sameshima**.
- Airoidi, H.** See **A. Skrabal**.
- Aiyar, S. S.** See **E. Heuser**.

- Akamatsu, S.**, galactose-sulphuric acid, i, 13.
 the occurrence of glycerophosphatase in takadiastase, i, 107.
 the hydrolysis of lecithin by takadiastase, i, 107.
 phytochemical reduction in the cyclohexane series, i, 126.
- Akiyama, M.**, collision of α -particles with light atoms, ii, 814.
 recoil of radioactive atoms, ii, 814.
- Aktien-Gesellschaft für Anilin-Fabrikation**, "thioindigo" and its derivatives, i, 977.
cyclohexylamines, i, 1057.
 preparation of colouring matters, i, 1111.
- Albani, L.** See *G. Charrier*.
- Albert, A.**, [aromatic arsenious acids], i, 579.
- Albrecht, F.** See *H. Lüters*.
- Albrecht, P. G.**, chemical study of several marine molluscs of the Pacific coast; the liver, i, 117.
- Alessandri, L.**, action of nitroso-derivatives on unsaturated compounds. II. Synthesis of α -ketodinitrones, i, 968.
- Alimchandani, R. L.**, properties of neighbouring hydroxy-groups attached to a benzene nucleus, i, 508.
- Alinari, E.**, probable presence of thujone in the essential oil of *Artemisia herba alba*, i, 754.
- Alisova, S. P.** See *A. J. Smirnov*.
- Allan, F. N.** See *S. S. Sokhey*.
- Allard, H. A.** See *W. W. Garner*.
- Allardt, H. G.** See *K. von Auwers*.
- Allen, C. F. H.** See *T. L. Davis*, and *E. P. Kohler*.
- Allen, E.** See *E. A. Doisy*.
- Allen, E. G.** See *R. S. Hubbard*.
- Allen, F.**, tri-colour mixing spectrometer, ii, 323.
- Allen, F. J., and A. R. Middleton**, thiocyanatocobaltous acid and its alkali salts, i, 840.
 modification of Vogel's reaction for cobalt, ii, 570.
- Allen, H. S.**, band spectrum of hydrogen, ii, 579.
- Allen, M.**, thermal emission and evaporation from water, ii, 385.
- Allen, R. S.** See *H. D. Clough*, and *H. A. Piper*.
- Allendorf, H.** See *F. Sauerwald*.
- Alles, G. A., and H. M. Winegarden**, oxidation of dextrose by iodine in the presence of insulin, i, 263.
- Allison, F. E.** See *K. D. Jacob*.
- Allison, S. K., and G. L. Clark**, apparatus for X-ray research, ii, 511.
- Allison, S. K., and W. Duane**, absorption measurements of certain changes in the average wave-length of tertiary X-rays, ii, 440.
 reflection of characteristic bromine X-radiation by a crystal of potassium bromide, ii, 720.
- Allison, S. K., and W. D. Harkins**, absence of helium from the gases left after the passage of electrical discharges: (i) between fine wires in a vacuum; (ii) through hydrogen; (iii) through mercury vapour, ii, 407.
- Allmand, A. J., and A. N. Campbell**, electro-deposition of manganese. I, ii, 555.
- Allmand, A. J., and L. Nickels**, conductivities of aqueous salt solutions, ii, 14.
- Allmand, A. J.** See also *H. J. T. Ellingham*.
- Allpress, C. F., and W. N. Haworth**, sugar carbonates and their derivatives. I, i, 943.
- Aloe, (Miss) M.**, esterification of naphthols in presence of catalysts, i, 37.
- Aloy, J., and A. Valdiguié**, oxidation induced by metals, i, 959.
- Alpern, D.**, effect of ultra-violet light on the content of fat and sugar in the blood of animals deprived of vitamins, i, 1366.
- Alpern, D., and J. A. Collazo**, effect of adrenaline on the composition of blood under normal conditions in fasting, and in avitaminosis, i, 440.
- Alpers, B. J., C. J. Campbell, and A. M. Prentiss**, spinal fluid sugar, i, 1256.
- Alpers, B. J.** See also *G. P. Grabfield*.
- Alport, A. C.**, determination of calcium in whole blood, ii, 500.
- Alsberg, C. L., and O. S. Rask**, gelatinisation by heat of wheat and maize starch, i, 946.
- Alsén, N., and G. Aminoff**, structure of crystalline mercury, ii, 554.
- Althidjian, Y.** See *H. Gault*.
- Alten, F.** See *E. Blank*.
- Alujevich, N.**, compound of cinnaumaldehyde with amylene, i, 182.
- Amadori, M.**, hydrated active tartaric acid, i, 1163.
- Amakawa, T.**, pharmacology of the camphor group; comparison of an isomeric camphor with Japan camphor, i, 591.
- Amar, J.**, coagulation and structure of the egg, i, 687.
 coagulation of blood, i, 783.
 coagulation and vegetable life, i, 808.
 coagulation and surface tension, ii, 144.

- Ambard, L.**, amylase, i, 106.
- Ambard, L.**, **F. Schmidt**, and **M. Arnovlyevitch**, duality of insulin, i, 1387.
- Amberger, C.**, and **A. Wieshahn** [with **J. Bauch**], glycerides of lard. II. Synthetical, i, 365.
- Aminoff, G.**, radius of the hydrogen atom in crystals, ii, 652.
- Aminoff, G.** See also **N. Alsén**.
- Ammann, H.** See **H. Fischer**.
- Ammon, C.** See **W. Dilthey**.
- Amoureux, G.** See **A. Berthelot**.
- Amstad, E.**, influence of intravenous injection of protein on the respiratory exchange, i, 581.
- Andant, A.**, critical opalescence, ii, 644.
- Anderegg, F. O.**, surface complications in the corona discharge, ii, 16.
- Anderegg, F. O.**, and **E. H. Bowers**, silent discharge involving catalysis, ii, 545.
- Anderegg, F. O.**, and **K. B. McEachron**, fog formation in air which has passed through a silent discharge, ii, 545.
- Anderson, A. B.** See **T. B. Robertson**.
- Anderson, A. K.**, and **H. S. Schutte**, determination of nitrogen in the wet combustion method for carbon, ii, 699.
- Anderson, A. K.**, and **J. J. Willaman**, the fermentation of dextrose by *Fusarium lini*, i, 126.
- Anderson, A. K.** See also **J. J. Willaman**.
- Anderson, E.** See **L. G. Story**.
- Anderson, E. G. E.** See **G. F. White**.
- Anderson, J. A.**, vacuum spark spectrum of calcium, ii, 578.
- Anderson, L.**, investigation of Smoluchowski's equation as applied to the coagulation of gold hydrosol, ii, 531.
- effect of sucrose on the rate of coagulation of a colloid by an electrolyte, ii, 531.
- Anderson, M. S.** See **P. L. Gile**.
- Anderson, P.** See **H. H. Hodgson**.
- Anderson, R. J.**, grape pigments. I. The anthocyanins in Norton and Concord grapes, i, 251.
- phytosterols of the endosperm of corn [maize], i, 924.
- grape pigments. III. Anthocyanins of Seibel grapes, i, 1390.
- Anderson, R. J.**, and **F. P. Nabenhauer**, grape pigments. II. Anthocyanins in Clinton grapes, i, 1152.
- phytosterols of wheat endosperm, i, 1153.
- reduction of sitosterol; preparation of dihydrositosterol or sitostanol, i, 1217.
- Anderson, R. J.**, and **F. P. Nabenhauer**, separation of unsaturated from saturated sterols, i, 1217.
- sitosterol, i, 1390.
- Anderson, R. P.**, and **A. M. Erskine**, composition of natural-gas gasoline, i, 481.
- Anderson, V. L.**, nitrate-reducing properties of plants, i, 1395.
- Anderson, W. T., jun.**, photolysis of potassium nitrate solutions, ii, 408.
- Andrade, E. N. da C.**, mobility of radioactive ions in the Bunsen flame, ii, 377.
- extension of zinc crystals, ii, 383.
- André, E.**, the additive power of iodine with regard to ethylenic compounds, i, 254.
- identity of phocenic and valeric acids, i, 607.
- marine animal oils; identity of phocenic and valeric acids, i, 1032.
- the iodometric determination of carbon disulphide, ii, 202.
- fractionation device for distillation under reduced pressure, ii, 469.
- André, G.**, composition of vegetable juices obtained by pressure, i, 250.
- André, G.**, and **H. Copaux**, comparative susceptibility of natural phosphates towards acids and its determination with citric acid, ii, 871.
- Andreasch, R.**, carbamide and guanidine derivatives of aliphatic sulphonc acids. II., i, 1290.
- parabanic acid, i, 1346.
- Andrews, E. R.** See **J. H. Coste**.
- Andrews, J. C.**, palladium electrodes, ii, 458.
- Andrews, S., F. Beattie, and T. H. Milroy**, acid-base exchanges in mammalian voluntary muscle, i, 1369.
- Andrianoff, N.** See **A. Pictet**.
- Andrusov, L.** See **M. Centnerszwer**.
- Angelescu, B. N.**, a new method for the volumetric determination of barium, ii, 203.
- Angelescu, E.**, and **D. Dumitrescu**, solubility of picric acid in mixtures of liquids, ii, 303.
- adsorption and distribution between two immiscible solvents, ii, 308.
- Angeletti, A.**, reduction of aziminoxides, i, 93.
- Angeli, A.**, reactions of certain aromatic and aliphatic derivatives, i, 626.
- nitropyrrrole and pyrrolealdehydes, i, 760.
- constitution of santonin, i, 1331.

- Angelico, F.**, and **F. Monforte**, picrotin ketone and picrotinic acid, i, 183.
 scission of potassium atractylate, i, 195.
 pyrroles, i, 203.
- Angerer, E. von**, ultra-violet line spectrum of chlorine, ii, 133.
- Angerer, E. von**, and **G. Joos**, absorption spectra of elements of the iron group, ii, 641.
- Angermann, L.** See **J. Meisenheimer**.
- Angern, (Miss) O.** See **P. Pfeiffer**.
- Anschütz, L.**, reaction between the chlorides of phosphorus and *o*-, *m*-, and *p*-hydroxybenzoic acids, i, 1195.
- Anschütz, R.** [with **F. Post**, **E. Corty**, **K. Riemar**, **R. Inderhees**, and **A. Lüsse**], α -dicresotides, i, 1072.
- Anschütz, R.**, and **A. Hilbert**, action of nitric acid on *aa*-diphenylethylene and *aa*-di-*p*-tolylethylene. II, i, 1296.
- Anschütz, R.**, and **K. Riepenkröger**, α - and β -disalicylides, i, 1072.
- Anschütz, R.**, and **F. Teutenberg**, aromatic selenonic acids. II. *m*-Xyleneselenonic acid, i, 889.
- Anson, M. L.**, **J. Barcroft**, **A. E. Mirksy**, and **S. Oinuma**, correlation between the spectra of various hæmoglobins and their relative affinities for oxygen and carbon monoxide, i, 1362.
- Antonov, G. N.**, connexion between surface tension and density, ii, 829.
- Antropoff, A. von**, systems: sodium chloride-sodium hydroxide-water and potassium chloride-potassium hydroxide-water, ii, 837.
- Aoyama, S.**, quantitative separation of platinum and iridium, ii, 505.
 reaction products of ruthenium tetroxide and hydrochloric acid, ii, 771.
- Apolant, L.** See **K. Lindner**.
- Appelt, E.**, and **W. Hoffmeister**, burner for elementary micro-analysis, ii, 314.
- Archibald, E. H.**, and **W. A. Gale**, system, sodium sulphate-magnesium sulphate-water, ii, 676.
- Archibald, E. H.**, and **W. Ure**, density and viscosity of acetone at low temperatures, i, 493.
- Ardagh, E. G. R.**, and **G. R. Bongard**, separation of zinc from iron and aluminium, ii, 349.
- Ardagh, E. G. R.**, **F. S. Seaborne**, and **N. S. Grant**, colorimetric determination of platinum by potassium iodide, ii, 788.
- Arkel, A. E. van**, monocrystalline tungsten, ii, 558.
 crystal structure of white tin, ii, 558.
 structure of mixed crystals, ii, 618.
- Armstrong, H. E.**, problems of hydrone and water: the origin of electricity in thunderstorms, ii, 12.
- Arnall, F.**, nitration. II. Mononitration of phenol, i, 636.
- Arndt, F.**, determination of halogens by combustion in a current of oxygen over platinised asbestos, ii, 497.
- Arndt, F.**, and **F. Bielich**, ring closure with hydrazinedicarbonamides containing sulphur. IV. The mechanism of intramolecular displacement, i, 22.
- Arndt, F.**, and **G. Källner**, chromanone and chromonol, i, 411.
- Arndt, F.**, and **P. Nachtwey**, dipyrrenes, i, 198.
 preparation of dehydracetic acid from ethyl acetoacetate and the mechanism of the reaction, i, 1223.
- Arnolvjevitch, M.** See **L. Ambard**.
- Arnold, E. L.**, *o*-cresol tetrachlorophthalein and some of its derivatives, i, 403.
- Arnoldi, W.**, and **J. Ferber**, effect of salts of calcium, sodium, and potassium on respiratory exchanges. I. Effect of parenteral administration of these salts, i, 679.
- Arnone, M.** See **C. Di Capua**.
- Artom, C.**, behaviour of dried enzymes on exposure to heat. III. Pancreatic enzymes, i, 1384.
- Asada, K.**, fat metabolism in avitaminosis. II. The total fat, neutral fat, cholesterol, and cholesterol ester in the blood of normal, starving, avitaminosed, and phosphorus-poisoned rats, i, 122.
 fat metabolism in avitaminosis. III. The fat and cholesterol content of the liver after phosphorus poisoning in normal, starved, and avitaminosed rats, i, 122.
 fat metabolism in avitaminosis. IV. The gaseous metabolism of starved avitaminosed rats during digestion and after adrenaline injection, i, 245.
 fat metabolism in avitaminosis. V. Distribution of fats and lipoids in the liver after phosphorus poisoning in normal, starving, and avitaminosed animals, i, 449.
- Asahara, G.**, the nature of graphite and amorphous carbon, ii, 172.
 the solidus curve of austenite, ii, 188.

- Asahina, Y.**, constitution of evodiamine and rutæcarpine, i, 665.
- Asahina, Y.** [with **Y. Murayama, B. Shibata, T. Kariyone, S. Kuwada, M. Asano, and M. Tanaka**], elsholtzia ketone (elsholtzione), i, 976.
- Asahina, Y.**, and **G. Hongo**, kessyl alcohol. I., i, 973.
- Asahina, Y.**, and **T. Matsuzaki**, synthesis of 3:5-dihydroxycinnamic acid, i, 1316.
- Asahina, Y.**, and **S. Terada**, condensation between pyruvic acid and formaldehyde, i, 367.
- Asami, K.** See **G. Kita**.
- Asano, M.**, aliphatic hydroxy-acids. I., i, 829.
- Asano, M.** See also **Y. Asahina**.
- Aschan, O.**, classification of the resinic acids from conifers, i, 533.
- chemical nature of the naphthenic acids, i, 638.
- diprene, a new terpene, i, 1212.
- Ashby, J. S.**, insulin-like substance in the kidney, spleen, and skeletal muscle, i, 683.
- Ashby, W.**, effect of kations on red blood-corpuscles, i, 1366.
- Ashdown, A. A.** See **T. L. Davis**.
- Asher, L.**, and **K. Jino**, physiology of glands. LVIII. Possible presence of toxic substances in the sera of thyroid- and parathyroid-ectomised animals in relation to the respiratory exchange, i, 581.
- Asher, L.**, and **A. Rohrer**, physiology of glands. LXI. Comparison of the oxygen consumption of surviving excised mammalian organs in the normal condition and after thyroid feeding, i, 582.
- Asher, L.**, and **Y. Takahashi**, physiology of glands. LX. Respiratory exchange of normal and splenectomised rats, i, 582.
- Asher, L.**, and **R. Tsukamoto**, physiology of glands. LIX. Influence of compensation on the glycosuric action of subcutaneous adrenaline injections, i, 585.
- Asheshov, I.**, and **I. Gjaja**, toluenated yeast is not dead, i, 125.
- Ashida, T.**, use of amalgamated zinc in the evolution method for the determination of sulphur in iron and steel, ii, 347.
- Ashworth, J. R.**, anhyseretic properties of iron and nickel and the energy change at the critical temperature, ii, 444.
- Astbury, W. T.**, rotatory dispersion of tartaric acid, i, 939.
- Astbury, W. T.**, and **K. Yardley**, tabulated data for the examination of the 230 space-groups by homogeneous X-rays, ii, 720.
- Aston, F. W.**, mass spectrum of indium, ii, 133.
- mass spectra of chemical elements.
- V. Accelerated anode rays, ii, 225.
- recent results obtained with the mass spectrograph, ii, 445.
- mass spectra of zirconium and some other elements, ii, 649.
- mass spectra of cadmium, tellurium, and bismuth, ii, 812.
- Aszódi, Z.**, urea content of red blood cells, i, 782.
- Atchley, D. W.**, **R. F. Loeb**, and **E. M. Benedict**, applications of the Donnan equilibrium to human blood-serum, i, 1009.
- Atchley, D. W.** See also **R. F. Loeb**.
- Aten, A. H. W.**, hydrogen electrode in alkaline solutions, ii, 88.
- Athanasin, G.**, calorific action of radiation on metals immersed in solutions of their salts, ii, 239.
- partition of energy in the arc spectrum of mercury, ii, 637.
- Atkin, W. R.**, and **G. W. Douglas**, titration curve of gelatin, ii, 592.
- Atkins, W. R. G.**, electrical conductivity of extracts from soils of various types and its use in detecting infertility, i, 819.
- solubility of phosphates in relation to hydrogen-ion concentration, ii, 674.
- Atkinson, R. H.**, fractional crystallisation of common lead, ii, 338.
- Atsumi, K.** See **T. Kariyone**.
- Aubel, E.**, metabolism of pyruvic acid in bacteria, i, 694.
- Aubel, E.** See also **L. J. Simon**.
- Audibert**, explosive decomposition of glyceryl trinitrate, i, 605.
- mechanism of the explosive reaction, ii, 399.
- Audubert, R.**, electronic theory and heats of formation of salts, ii, 465.
- Auerbach, F.**, and **E. Bodländer**, determination of dextrose by oxidation with iodine, ii, 127.
- Auerbach, F.**, and **D. Krüger**, determination of malic acid in fruit syrups and other fruit products, ii, 130.
- Aufschläger, R.**, explosibility of ammonium nitrate, ii, 255.
- Aufschläger, R.** See also **P. Naoum**.
- Auger, P.**, secondary β -rays produced in a gas by X-rays, ii, 286, 440.

- Auger, V.**, solubility of titanio acid in alkali hydroxides and in alkali carbonates; crystalline titanium oxychloride, ii, 52.
two attempts to replace the ionic theory by a theory based on the molecular condition of water, ii, 146.
volumetric determination of ammonium salt-, ii, 349.
- Auger, V.**, and (*Mlle.*) **L. Odinet**, reduction of arsenic acid by sulphurous acid in presence of vanadic acid, ii, 202.
co-precipitation of cobalt and nickel by stannic sulphide; colorimetric determination of cobalt, ii, 278.
- Auger, V.**, and (*Mlle.*) **I. Robin**, basic zinc acetate analogous to the beryllium salt, i, 705.
- Auguste, C.**, nephelometric micro-determination of carbamide in biological fluids, ii, 430.
- Auguste, C.** See also **Michel Polonovski**
- Auméras, M.** See **E. Carrière**.
- Austerweil, G.**, eutectics of camphene with other terpenes, i, 658.
- Austin, J. H.**, determination of carbon dioxide in serum in presence of ether, ii, 873.
- Austin, J. H., G. E. Cullen, H. C. Gram,** and **H. W. Robinson**, changes in blood electrolytes in ether acidosis, i, 1364.
- Austin, J. H., and H. C. Gram**, effect of ether added in vitro on the distribution of carbon dioxide and chloride between cells and serum, i, 781.
- Austin, P. C., and V. A. Carpenter**, rotatory dispersion of derivatives of tartaric acid. I. Methylene derivatives, i, 1164.
- Austin, P. C.** See also **T. M. Lowry**.
- Autenrieth, W., and G. Thomae**, simple and mixed acid anhydrides, i, 485.
application of the principle of the Schotten-Baumann benzoylation process to acid anhydrides, i, 961.
- Auwers, K. von**, indoxazens and isooxazoles, i, 572.
constitution of pyrazoles, indazoles, and anthranils, i, 669.
constitution of diosphenol [buchu-camphor], i, 970.
valency requirements of organic radicals, i, 1055.
constitution of acylindazoles, i, 1348.
- Auwers, K. von** [with **T. Meissner**, and **J. Koch**], formation of coumaranones, chromanones, and hydroxyhydrindones from phenols. I. Dicyclic ketones from *p*-cresol and α -bromo- α -ethylbutyric acid. II. Dicyclic ketones from *m*-cresol and α -bromo-isobutyric acid, i, 1219.
- Auwers, K. von**, and **H. G. Allardt**, stable and labile acyl derivatives of the indazoles, i, 878.
alkylation of indazoles, i, 992.
- Auwers, K. von, W. Buschmann,** and **R. Heidenreich**, tetrahydroindazoles, i, 325.
- Auwers, K. von**, and **J. Heyna**, addition to compounds with marked conjugation. I. Addition of hydrogen and bromine to sorbic acid and related compounds, i, 8.
- Auwers, K. von**, and **O. Jordan**, benzoyl-methylcarbinol and acetylphenylcarbinol, i, 384.
oximes of *o*-aminobenzophenone and the Beckmann transformation, i, 743.
anilino-flavones, i, 869.
- Auwers, K. von**, and **W. Kohlhaas**, spectrochemistry of heterocyclic nitrogen compounds, i, 666.
- Auwers, K. von**, and **W. Müller**, addition to compounds with marked conjugation. II. Addition of hydrogen and bromine to cinnamylidene derivatives, i, 44.
- Auwers, K. von**, and **B. Ottens**, configuration of stereoisomeric oximes and the structure of oxime-*N*-ethers and *aci*-nitro-derivatives, i, 516.
physical constants of stereoisomeric compounds, i, 513.
- Auwers, K. von**, and **G. Wegener**, valency requirements of alkyl [radicals], i, 534.
- Auwers, K. von**, and **G. Wittig**, *o*-hydroxydiphenyl, i, 1061.
diphenoquinones, i, 1209.
- Avasare, M. D.** See **K. G. Naik**.
- Aversenq, Delas, Jaloustre,** and **Maurin, L.**, action of thorium-X on the maturation of eggs, the germination of seeds, and the growth of plants, i, 796.
- Avery, O. T., and H. J. Morgan**, occurrence of peroxide in cultures of *Pneumococcus*, i, 808.
- Avery, O. T., and J. M. Neill**, oxidation and reduction by *Pneumococcus*. I. Production of peroxide by anaerobic cultures of *Pneumococcus* on exposure to air under conditions not permitting active growth. II. Production of peroxide by sterile extracts of *Pneumococcus*, i, 915.
oxidation and reduction by *Pneumococcus* III. Reduction of methylene-blue by sterile extracts of *Pneumococcus*. IV. Oxidation of hæmotoxin in sterile extracts of *Pneumococcus*. V. Destruction of oxyhæmoglobin by sterile extracts of *Pneumococcus*, i, 1015.

- Avery, O. T.** See also *H. J. Morgan*.
Avogadro, L., dioximes. XIII., XVIII., and XIX., i, 54, 294, 1202.
Awbery, J. H., and *E. Griffiths*, apparatus for determining the heat of evaporation of liquids of high boiling point, ii, 541.
Ayers, K. B. See *W. J. Kelly*.
Ayres, T. L. R. See *J. S. Townsend*.
Azinières, L. See *A. Bouzat*.
Azuma, R., and *W. Hartree*, the absence of effect of insulin on the heat production in isolated frog's muscle, i, 344.

B.

- Babbott, F. L., jun.**, *J. A. Johnston*, *C. A. Haskins*, and *A. T. Shohl*, hydrogen-ion concentration of gastric contents of infants, i, 584.
Bach, A., and *E. Cheraskova*, enzyme content of the blood. III. Catalase values of the blood of thyroidectomised goats, i, 1253.
Bach, A., and *M. Monosson*, alleged reduction of carbon dioxide to formaldehyde by hydrogen peroxide, and the assimilation hypothesis of T. Thunberg, i, 612.
Bach, A. See also *E. Ivanitzky-Vassilenko*, and *A. Oparin*.
Bach, D., variations in hydrogen-ion concentration under the influence of the assimilation of nitrates by *Aspergillus repens*, de Bary, i, 353. variations in hydrogen-ion concentration during the assimilation of ammoniacal salts of strong acids by *Aspergillus repens*, de Bary, i, 916.
Bach, S. See *O. Gerngross*.
Bacharach, A. L., determination of lactose by the polarimetric and the gravimetric methods, ii, 72.
Bacher, F. See *R. Stoermer*.
Bachmann, W. E. See *M. Gomberg*.
Bachrach, (Mlle.) E. See *C. Richet*.
Backa, R. See *J. Meyer*.
Backeberg, O. G. See *F. D. Chattaway*.
Backer, H. J., and *J. H. de Boer*, *n*- α -sulphobutyric acid and its optically active components, i, 708. functional derivatives of α -sulphobutyric acid and the rotatory power of their active components, i, 1284.
Backhurst, I., and *G. W. C. Kaye*, all-metal high vacuum pump system, ii, 468. a metal annular-jet vacuum pump, ii, 468.
Backman, E. L., effect of veratrine on the intestines and the uterus and importance of potassium and calcium ions in this connexion, i, 1140.
Bacon, C. W. See *W. W. Garner*.
Bacon, F. J., *G. C. Jenison*, and *R. E. Kremers*, the genus *Mentha*; *Mentha piperita*, i, 924.
Bacon, F. J. See also *C. D. Leake*.
Badareu, E., electron stream generated by ionic impacts on platinum in a high vacuum, ii, 376.
Badger, E. M., ammonia, carbon, hydrogen cyanide, hydrogen equilibrium, and the free energy of hydrogen cyanide, ii, 849.
Badische Anilin- & Soda-Fabrik, anthracene derivative, i, 1056. preparation of alcohols from aldehydes, i, 1189.
Badoche, M. See *C. Mouren*.
Badolato, P. See *S. Berlingozzi*, and *A. Piutti*.
Bächer, S., and *M. M. Kosian*, proteins of immune sera, especially the ratio of globulin to albumin (protein index), i, 681.
Bäckström, H. L. J., the dolomite system, ii, 257.
Bähr, H. See *E. Knoevenagel*.
Baerle, A. van. See *F. Kehrman*.
Baerwind, H. See *H. Freundlich*.
Baeyer, O. von, and *W. Kutzner*, experiments with a glow lamp as a counting chamber [for the detection of α -, β -, and γ -rays, etc.], ii, 226.
Bagdassarijan, O. S. See *A. E. Tschitschibabin*.
Bagnall, D. J. T. See *H. Bassett*.
Bagster, L. S., evaporation rate of some solutions, ii, 399.
Bahlke, W. H. See *B. F. Lovelace*, and *R. E. Wilson*.
Bailey, J. R. See *E. J. Poth*.
Bailey, V. A., motions of electrons in neon, ii, 221.
Bailly, O., and *J. Gaumé*, action of some halohydrins on normal sodium phosphate in aqueous solution and on some glycerophosphates, i, 605.
Baines, H., and *J. E. Driver*, dyes of the aurin type. II., i, 638.
Baker, J. W., *C. K. Ingold*, and *J. F. Thorpe*, ring-chain tautomerism. IX. The mutarotation of the sugars, i, 262.
Baker, R. T., and *H. G. Smith*, Australian *Melaleucas* and their essential oils. VI., i, 757.
Bakhuyzen, W. H. van de S., proof of Nernst's heat theorem, ii, 654. chemical constant of hydrogen, ii, 654.
Bakke, G. See *O. Collenberg*.

- Bakker, G.**, theory of the capillary layer of a liquid in contact with its saturated vapour, ii, 23.
- Balaban, I. E.**, and **F. L. Pyman**, bromo-derivatives of 1-methylglyoxaline and constitution of "chloroxal-methylin," i, 1111.
- Balandin, A.**, relation between chemical affinity and the infra-red spectra of [condensed] compounds, ii, 719.
- Balareff, D.**, dissociation of some acid phosphates and oxides by heat, ii, 479.
- rôle of water in reactions in the solid state. I., II., and III., ii, 483, 611, 858.
- experiments in support of Tamman's theory of the glassy state, ii, 593.
- Balareff, D.**, and **M. Dotschewa**, "lead method" of separating phosphoric acid in qualitative analysis, ii, 700.
- Balas, F.** See **L. Ruzicka**.
- Baldet, F.**, spectra of thermionic discharge in carbon monoxide; new band spectra, ii, 438.
- Bálint, M.**, and **H. Petow**, iodometric determination of sodium, ii, 500.
- Ball, N. G.** See **H. H. Dixon**.
- Baltadschiewa, M.** See **A. Skrabal**.
- Baly, E. C. C.**, and **R. A. Morton**, refractivity and the molecular phase hypothesis. I., ii, 714.
- Bamberger, E.**, formula of anthranil, i, 1066.
- Bamberger, E.**, and **J. Brun**, arylazides. I. Conversion of *p*-methylarylazides into homologues of quinol in presence and absence of phenol, i, 227.
- arylazides. II. The conversion of *p*-methylarylazides into imino- ψ -quinols and ψ -quinols, i, 227.
- arylazides. III. Quinol ethers from *p*-methylated arylazides, i, 281.
- Bamberger, E.**, **J. Brun**, and **A. Hartmann**, arylazides. IV. Iminoquinol ethers from *p*-methylated arylazides, i, 282.
- Bamberger, M.**, and **K. Trautzl**, determination of ozone in the presence of hydrogen peroxide, ii, 563.
- Bamford, F.**, Denigès' test for butyric acid, ii, 428.
- Ban, N.**, apparatus for filtering hygroscopic substances, ii, 402.
- Bancroft, W. D.**, preliminary experiments on feather pigments, i, 1332.
- second report of the Committee on contact catalysis, ii, 100.
- electrolytic theory of corrosion, ii, 686.
- action of metals on nitric acid, ii, 745.
- catalytic action of nitrous acid, ii, 746.
- Banerji, R. C.**, temperature coefficients of some reactions, ii, 601.
- Banerji, R. C.**, and **N. R. Dhar**, catalysis. XVII. Temperature coefficients of some reactions in the light and in the dark, ii, 466.
- Bangham, D. H.**, and **F. P. Burt**, behaviour of gases in contact with glass surfaces, ii, 392.
- Banik, E.** See **F. Wrede**.
- Banti, L.**, extraction and purification of insulin, i, 1387.
- Banting, F. G.**, and **S. Gairns**, factors influencing the production of insulin, i, 1017.
- Barbaudy, J.**, the isoelectric point of *m*-aminobenzoic acid and its equilibrium with water, acetic acid, and sodium acetate, i, 286.
- Barck, H.** See **Ernst Müller**.
- Barcroft, H.** See **J. Barcroft**.
- Barcroft, J.**, and **H. Barcroft**, blood pigment of *Arenicola*, i, 442.
- Barcroft, J.** See also **M. L. Anson**.
- Bardhan, J. C.** See **R. L. Datta**.
- Bardwell, D. C.**, and **H. A. Doerner**, chemical action produced by niton. IV. Characteristics of the α -ray bulb as a source of ionisation, ii, 12.
- Bardwell, D. C.** See also **S. C. Lind**.
- Bargen, J. A.** See **J. L. Williams**.
- Barger, G.**, and **F. D. White**, the constitution of galegine, i, 272.
- galuteolin, a new glucoside from *Galega officinalis*, i, 355.
- Barkan, G.**, solubility of salts of uric acid. II., ii, 660.
- Barker, A. L.**, and **G. S. Skinner**, deamination of esters of alanine and aminoisobutyric acid, i, 379.
- Barker, E. F.**, molecular absorption spectra of hydrogen cyanide, ii, 286.
- Barkla, C. C.**, and **A. E. M. Dallas**, corpuscular radiation excited by X-rays, ii, 140.
- Barkus, O.**, rate of elimination of inorganic salts from the blood stream, i, 1365.
- determination of chloride ions, ii, 777.
- Barlot, J.**, ferric oxalate and its application to the separation of iron and calcium, i, 1162.
- Barnard, L.** See **J. Oliver**.
- Barnes, B. T.**, ionisation of caesium vapour and the mobility of electrons in the Bunsen flame, ii, 291.
- Barnes, J. W.** See **J. Kenyon**.
- Barnett, E. de B.**, mechanism of substitution reactions in the aromatic nucleus, i, 1292.

- Barnett, E. de B., and J. W. Cook**, studies in the anthracene series. IX., i, 720.
preparation of acid anhydrides, i, 1194.
- Barnett, E. de B., J. W. Cook, and H. H. Grainger**, anthraquinonecarboxylic acids, i, 1316.
- Barnett, E. de B., J. W. Cook, and W. C. Peck**, formation of quaternary ammonium salts. II., i, 871.
- Barnett, E. de B., and M. A. Matthews**, preparation of 3:3'-dinitrobenzophenone, i, 520.
studies in the anthracene series. VIII., i, 752.
- Barnett, E. de B., and I. G. Nixon**, preparation of anilides and esters, i, 1192.
- Barnette, R. M., F. C. Gerretsen, D. J. Hissink, and J. van der Spek**, colorimetric determination of acidity of soils, ii, 347.
- Barr, D. P.** See *H. E. Himwich*.
- Barr, G.**, action of potassium hydroxide on nitric oxide, ii, 408.
correction of the density of liquids for the buoyancy of air, ii, 653.
- Barratt, S.**, the absorption spectra of mixed metallic vapours, ii, 138.
- Barraud, M.** See *G. Dupont*.
- Barrett, G. R.** See *E. P. Kohler*.
- Barrett Co., The**, preparation of benzaldehyde, i, 180.
- Barrio, N. G.**, blood and spinal fluid. II. Calcium, magnesium, and phosphorus, i, 909.
- Bartell, F. E.**, membrane potentials and their relation to anomalous osmosis, ii, 527.
- Bartell, F. E., and M. van Loo**, preparation of membranes with uniform distribution of pores, ii, 237.
- Bartell, F. E., and E. Miller**, adsorption by activated sugar charcoal. III. Mechanism of adsorption, ii, 734.
- Bartels, H.**, intensity distribution, series formulae, and excitation function in reference to the spectra of the alkalis, ii, 136.
vacuum-arc spectrum of sodium. I., ii, 709.
- Barton, E. H., and H. M. Browning**, viscosities of liquids experimentally correlated to pendulum dampings, ii, 233.
- Barton, V. P.**, light sensitivity of cuprous oxide and selenium, ii, 292.
- Bartsch, O.**, foam systems, ii, 832.
- Bartschat, F.**, failure of the test for phosphorus in a case of phosphorus poisoning, ii, 499.
- Bartschat, F.** See also *E. Dinslage*.
- Barus, C.**, density and diffusion of gases measured by displacement interferometry, ii, 385.
- Bary, P.**, polymerisation of the cellulose molecule, i, 618.
absorption of gases by colloidal oxides, and the mode of action of electric accumulators, ii, 239.
- Bass, L. W.**, new methods of splitting pyrimidines. V. The action of oxygen plus ferrous salts on thymine under the influence of light, i, 319.
- Bass, L. W., and O. Baudisch**, new methods of splitting pyrimidines. III. The action of iodine solution on pyrimidines, i, 318.
- Bass, L. W., and T. B. Johnson**, interaction of some aromatic hydrocarbons, alcohols, and aldehydes with nitrogen peroxide, i, 386.
- Bass, L. W.** See also *O. Baudisch*, and *K. Fosse*.
- Bassett, H., and D. J. T. Bagnall**, potassium salts of phenolphthalein, i, 856.
- Bassett, H., and A. S. Corbet**, hydrolysis of potassium ferricyanide and potassium cobalticyanide by sulphuric acid, i, 950.
phase rule study of the cupro-, argento-, auro-, and thallo-cyanides of potassium, i, 1053.
- Bates, L. F.**, range of α -particles in rare gases, ii, 813.
- Bates, L. F., and J. S. Rogers**, particles of long range emitted by the active deposits of radium, thorium, and actinium, ii, 84.
particles of long range from polonium, ii, 296.
- Battegay, M., and J. Bernhardt**, anthraquinonylurethanes; anthraquinonyl-carbamides, i, 59.
- Battegay, M., and P. Brandt**, anthracenemonosulphonic acids; sulphonation of hydrocarbons in a basic or neutral medium, i, 275.
- Battegay, M., and P. Dassigny**, anthraquinonylsemicarbazides, i, 655.
- Battegay, M., and P. Haefely**, nitro-*p-tert.*-butyltoluene, i, 1176.
- Battegay, M., and M. Kappeler**, artificial musks, i, 1177.
- Battegay, M., C. Langjahr, and P. Rettig**, naphthol-AS-[2-hydroxy-3-naphthoanilide] derivatives, i, 722.
- Battegay, M., and A. Wolff**, (*iso*- γ) *J*-acid [6-amino- α -naphthol-3-sulphonic acid], i, 99.
- Battelli, F., and L. Stern**, carnisapidine in animal tissues, i, 242.

- Battelli, F.**, and **L. Stern**, sarcochrome in animal tissues, i, 243.
- Battelli, F.** See also **L. Stern**.
- Batuecas, T.**, density of gaseous dimethyl ether, i, 1280.
- Bauch, J.** See **C. Amberger**.
- Baudet, H. P.**, replaceability of the halogen atom in chloro- and bromo-2-cyano-4-nitrobenzene, i, 1292.
- Baudisch, O.**, pyrimidines. VI. New colour tests for uracil and cytosine, i, 991.
- Baudisch, O.**, and **L. W. Bass**, new methods of splitting pyrimidines. IV. A study of the mechanism of the decomposition of thymine, i, 318.
- Baudisch, O.**, and **L. A. Welo**, mechanism of catalytic action of iron salts. I., i, 1141.
- Baudisch, O.** See also **L. W. Bass**, and **M. F. Pfaltz**.
- Baudrenghien, J.**, Δ^2 -penten- γ -ol [ethylallyl alcohol], i, 133.
- Bauer, E.**, interferential methods for determining the duration of and the law of emission of light by atoms, ii, 363.
- Bauer, E.** See also **A. Haller**, **W. Manchot**, and **R. Weinland**.
- Bauer, K. H.**, perilla oil. III. Bromides of the linolenic acids of perilla oil, i, 364.
replacement of acid radicals in glycerides, i, 825.
- Bauer, K. H.**, and **K. Bühler**, tertiary amino-ketones and their use in ring syntheses, i, 985.
- Bauer, W. W.**, and **R. Adams**, diarsono-diphenyl [diphenyl-4:4'-diarsinic acid] and derivatives, i, 1247.
- Baughman, W. F.** See **G. S. Jamieson**.
- Baumann, E. J.**, determination of organic phosphorus, ii, 58, 498.
method for preparing large quantities of yeast-nucleic acid as a magnesium compound, i, 1155.
- Baumecker, W.**, the antagonism between magnesium and calcium-ions, i, 119.
- Baumgarten, P.**, degradation of pyridine into glutacondialdehyde and re-conversion of the latter into pyridine. I., i, 1166.
- Baur, E.**, lactic acid fermentation of dextrose by peptone, i, 124.
electrode potentials in non-aqueous solvents, ii, 597.
photolysis of uranyl oxalate, ii, 669.
one-sided equilibrium, ii, 81.
- Baur, E.**, and **P. F. Büchi**, the photolysis of carbonic acid, ii, 82.
- Baur, E.**, and **A. Perret**, action of light on dissolved silver salts in the presence of zinc oxide, ii, 857.
- Bauroth, M.** See **C. Mannich**.
- Baxter, G. P.**, and **W. C. Cooper, jun.**, aqueous pressure of hydrated crystals. II. Oxalic acid, sodium sulphate, sodium acetate, sodium carbonate, disodium phosphate, barium chloride, ii, 389.
revision of the atomic weight of germanium. I. Analysis of germanium tetrachloride, ii, 690.
- Baxter, G. P.**, and **M. J. Dorcas**, comparison of the atomic weights of terrestrial and meteoric cobalt. V. Analysis of cobaltous chloride, ii, 341.
- Bay, I.**, effect of nitrogenous nutrition on the activity of brewer's yeast, i, 802.
- Bayer, O.** See **J. von Braun**.
- Bayerl, A.** See **R. Weinland**.
- Bayle, E.**, and **E. Fabre**, fluorescence of the alkaloids of the *isoquinoline* and *tetrahydroisoquinoline* group: papaverine, narcotine, hydrastine, and their decomposition products, i, 980.
fluorescence of some organic compounds, ii, 220.
application of fluorescence phenomena to the identification of medicaments, ii, 574.
- Bayle, E.** See also **H. George**.
- Bayley, P. L.**, effect of X-rays on halite and sylvite, ii, 855.
- Bayne-Jones, S.** See **H. S. Everett**.
- Bazzoni, C. B.**, and **C. T. Chu**, soft X-rays from tungsten, ii, 215.
- Bazzoni, C. B.**, and **J. T. Lay**, intensity relations in the helium spectrum, ii, 284.
- Bazzoni, C. B.**, and **A. T. Waldie**, impact effects in nitrogen and nitric oxide, ii, 141.
- Beal, G. D.**, and **K. E. Sparks**, preparation of reagents free from arsenic, ii, 405.
- Beato, J.** See **J. Casares Gil**.
- Beattie, F.** See **S. Andrews**.
- Beattie, J. A.**, pressure-volume-temperature relations for gaseous ethyl ether, ii, 300.
application of phase rule to galvanic cells, ii, 838.
- Beattie, J. A.** See also **F. G. Keyes**.
- Becherer, F.** See **H. Rupe**.
- Bechhold, H.**, and **L. Gutlohn**, apparatus for ultrafiltration, ii, 621.
- Bečka, J.**, refractometric and interferometric quantitative analysis. II. Blood serum, i, 1251.

- Bečka, J.**, and **A. Simánek**, protein coagulation in drops. VI. Influence of nitrogen compounds on the precipitation, i, 1251.
- Bečka, J.**, and **V. Zemanec**, refractometric and interferometric analysis. III. Changes in the refractive power of serum, i, 1251.
- Becke, F.**, migration of material during metamorphism, ii, 416.
- Beckenkamp, J.**, atomic arrangement of crystalline elements, ii, 32.
the arrangement of atoms and valency in crystals, ii, 32.
crystallisation [crystal structure] of sodium chlorate and sodium chloride, ii, 143.
derivation of the principal types [of space lattice] from the basic types, α_1 and β_1 , ii, 720.
internal structure of crystallised carbon and of benzene, ii, 754.
- Becker, A.**, precision measurement of radium emanation, ii, 226.
- Becker, H. G.**, prevention of "bumping" during vacuum distillation, ii, 246.
- Becker, H. G.**, and **W. E. Abbott**, determination of dissolved air in small quantities of water, ii, 200.
- Becker, K.**, the crystal structure of metals, mixed crystals, and metallic compounds, ii, 95.
space lattice of triphenylmethane, ii, 449.
- Becker, Richard**, thermodynamics of the ionisation of monatomic gases, ii, 91.
- Becker, Rudolf**, action of alkaloids on the field-locust (*Acridides*), i, 1375.
- Becker, W.** See **R. Stollé**.
- Beckmann, R.** See **O. Diels**.
- Becquerel, P.**, bio-radioactivity, i, 590.
- Bedel, C.**, toxicity of a polymeride of hydrocyanic acid, i, 1261.
- Bedel, C.** See also **P. Lebeau**.
- Bedos, P.** See **M. Godchet**.
- Beebe, R. A.**, and **H. S. Taylor**, rapid method for the determination of heats of adsorption and some values for hydrogen on nickel and copper, ii, 159.
- Beck, P. A. A. van der.** See **W. P. Jorissen**.
- Behnecke, H.** See **O. Diels**.
- Behr, M.** See **A. Brukl**, and **L. Moser**.
- Behrendt, H.**, influence of phosphate and bicarbonate on the dissociation of calcium compounds in the cerebro-spinal fluid, i, 458.
action of bicarbonate and secondary phosphate on the dissociation of calcium, ii, 456.
- Beil, A.**, "indigosol," i, 1346.
- Beiser, A.** See **H. Fringsheim**.
- Beja, M.**, electrical conductivity of concentrated ozone-oxygen solutions, ii, 13.
- Beja, M.** See also **E. H. Riesenfeld**.
- Beketov, N.** See **N. S. Kurnakov**.
- Belge, C. H.** See **L. A. Congdon**.
- Bell, H.**, halogen hydrides, ii, 230.
- Bell, J. M.** See **F. P. Venable**.
- Belladen, L.**, and **A. Ciampa**, complexes of carbamide with cadmium salts, i, 1174.
- Bellenot, H.** See **A. Berthoud**.
- Bellis, B.** See **A. F. Hess**.
- Bellucci, I.**, and **B. Ricca**, action of persulphates on metallic cyanides, ii, 672.
rapid determination of cyanogen in complex iron cyanides, ii, 791.
- Bellucci, I.**, and **G. Savoia**, detection of zirconium in the presence of titanium, ii, 788.
- Bemuth, F. von.**, and **F. Goebel**, excretion of amino-acids by infants during starvation and on a protein-rich diet; formol titration in small quantities of urine, i, 794.
- Benary, E.**, and **P. Lorth**, action of triphenylmethyl chloride on ethyl β -aminocrotonate and analogous compounds, i, 1192.
- Benary, E.**, and **H. Psille**, synthesis of pyridineketones from hydroxymethylene-acetone and -acetophenone, i, 872.
- Benary, E.**, and **August Schmidt**, carbithionic and thionic acid derivatives of pyrazolones, i, 558.
- Benary, E.**, and **G. Schwach**, hydroxypyrrrole derivatives [IV] and certain reactions of chloroacetyldiacetonitriles, i, 416.
- Benczer, L.** See **M. Kohn**.
- Benda, O.** See **R. Müller**.
- Bender, J. A.** See **F. C. Vilbrandt**.
- Bender, M.** See **W. Friedrich**.
- Benedetti, B. de.** See **D. Bigiavi**.
- Benedetti-Pichler, A.**, quantitative micro-chemical separations. I. Use of "filter-tubes," ii, 775.
- Benedict, E. M.** See **D. W. Atchley**, **G. A. Harrop**, and **R. F. Loeb**.
- Benedict, S. R.**, and **T. P. Nash, jun.**, ammonia content of blood, ii, 626.
- Benedict, S. R.**, and **R. C. Theis**, modification of molybdic acid method for determination of inorganic phosphorus in serum, ii, 700.
- Benedict, S. R.** See also **T. P. Nash, jun.**, and **R. C. Theis**.

- Bengtsson, E.**, combination relations in the band spectra of the copper flame, ii, 78.
- Bengtsson, N.**, determination of ammonia in soil, i, 1394.
- Bennett, G. M.**, interpretation of surface energy data, ii, 390.
- Bennett, H. B.**, modified dichromate method for the determination of glycerol; hydration of curd fibres of sodium palmitate, ii, 875.
- Bennewitz, K.**, and **P. Günther**, condition of hydrogen dissolved in platinum, ii, 724.
- Bennion, E. B.**, aleurone cells of cereals, i, 924.
effect of germination on the aleurone layer, i, 1153.
- Benoit, F.** See **A. Guntz**.
- Benrath, A.**, metallic compounds of dibenzoylhydrazide, i, 775.
- Benrath, A.** [with **W. Bücher, A. Wolber**, and **J. Zeitzius**], bromo-iridates of complex metal bases and chloro- and bromo-iridates of organic bases of high molecular weight, ii, 559.
- Benrath, A.** [with **W. Lamberz** and **O. Krüger**], thallothallic chlorides and bromides, ii, 612.
- Benrath, A.**, and **E. Hertel**, photo-chlorination of aliphatic compounds in carbon tetrachloride, i, 821.
- Benrath, A.**, and **W. Kohlberg**, water of crystallisation of complex salts of cobalt, ii, 686.
- Benrath, A.**, and **W. Schröder**, cuprous-cupric cyanide ammine compounds, i, 950.
- Benrath, A.**, and **W. Standop**, fluidity of crystallised salts, ii, 607.
- Benrath, A.**, and **H. Würzburger**, neutral and acid salts of cobalt-ammines, ii, 557.
- Benzon, B.** See **G. Bertrand**.
- Beretta, A.**, *s*-trinitroarylazodiarylamines, i, 335.
- Beretta, A.** See also **G. Charrier**.
- Bergeim, F. H.** See **M. T. Bogert**.
- Bergeim, O.** See **C. W. Lueders**.
- Bergel, F.** See **H. Wieland**.
- Berger, G.**, the influence of constitution on the catalytic hydrolysis of esters by acids, i, 486.
- Berger, J.**, van der Waals' equation of state and the liquid state of aggregation. I., ii, 654.
- Berger, W.**, and **L. Petschacher**, micro-determination of proteins in blood serum, ii, 636.
- Berggren, R. E. L.** See **E. J. Cohn**.
- Berghheimer, E.** See **R. Lorenz**.
- Berglund, H.** See **J. M. Looney**.
- Bergman, A. G.**, double decomposition in the absence of solvents, ii, 178.
- Bergman, H. D.**, **H. H. Dukes**, and **J. H. Yarborough**, enzymic action of extracts of the duodenal region of domestic animals, i, 1267.
- Bergman, S. W.** See **O. Svanberg**.
- Bergmann, M.**, iodo-compounds of simple $\alpha\beta$ -cycloacetals of the type of starch iodide, i, 618.
- Bergmann, M.** [with **H. Schotte, E. Rennert, S. Ludewig**, and **M. Kobel**], unsaturated reduction products of the sugars and their transformations. VIII., i, 265.
- Bergmann, M.** [with **F. Weinmann, P. Eckwall, E. Brand**, and **F. Dreyer**], synthesis and structure of glycerides, i, 930.
- Bergmann, M.**, **E. Brand**, and **F. Weinmann**, reactions of peptide-like compounds. II. Derivatives of γ -amino- β -hydroxybutyric acid, i, 18.
- Bergmann, M.**, **M. Jacobsohn**, and **H. Schotte**, formaldehyde compounds of simple amino-acids, i, 19.
- Bergmann, M.**, and **E. Kann**, polymerisation of aldols, i, 1042.
- Bergmann, M.**, and **S. Ludewig**, glucosidic acetals derived from simple α - or β -hydroxy-ketones and their polymerisation, i, 490.
- halogen compounds of starch, i, 837.
- Bergmann, M.**, and **A. Miekeley**, tri-aldehyde compounds of primary amines, i, 622.
- Bergmann, M.**, **A. Miekeley**, and **F. Stather**, unsaturated reduction products of the sugars and their transformations. VII. The anhydride of a disaccharide from δ -hydroxy- δ -acetyl-butyl alcohol, i, 5.
- Bergmann, M.**, and **S. Sabetay**, α mono-glycerides of fatty acids of high molecular weight, i, 932.
- Bergstrom, F. W.**, reaction between mercuric cyanide and certain metals in liquid ammonia, i, 949.
displacement of metals from solutions of their salts by less electropositive elements. I. Replacement of sodium and potassium by magnesium and aluminium, ii, 106.
potassium ammonioaluminate, potassium ammoniomanganite, and manganous amide, ii, 607.
- Berkeley, C.**, distribution of pentose compounds in the pancreatic tissues of the ling cod (*Ophiodon elongatus*, Girard), i, 457.

- Berl, E.**, and **J. Bitter**, the formation of ethyl chloride from ethylene and hydrogen chloride, i, 256.
- Berl, E.**, and **W. Pfannmüller**, iodometric determination of sodium sulphide, ii, 272.
- retention of organic dyes by silicic acid, ii, 737.
- Berl, E.**, and **E. Wachendorff**, determination of organic vapours in gas mixtures by means of active charcoal, particularly of benzene in illuminating and coke-oven gas, ii, 505.
- Berlin, E.**, and **F. Kutscher**, recognition of arginine, betaine, choline, and acanthine in the embryos and liver of the spiny dog-fish (*Acanthias vulgaris*), i, 907.
- Berlin, L. W.** See **K. Brand**.
- Berlingozzi, S.**, and **P. Badolato**, action of chloropierin on phenol, i, 725.
- Berlingozzi, S.**, and **G. B. Capuano**, 3-hydroxyquinoline-4-carboxylic acids, i, 1345.
- Berlingozzi, S.**, and **C. Marzella**, certain quinoline-4-carboxylic acids, i, 314.
- Bernard, H.** See **Pastureau**.
- Bernardi, V.** See **G. Ponzio**.
- Bernays, P.** See **D. Reichinstein**.
- Bernhardt, J.** See **M. Battegay**.
- Bernton, A. W.**, **H. R. Ing**, and **W. H. Perkin, jun.**, configuration of $\alpha\alpha'$ -dibromo-dibasic acids. II. Derivatives of adipic acid, i, 1039.
- Berry, R. A.**, the manurial properties of lead nitrate, i, 480.
- Bert, L.**, action of mixed dialkyl sulphates on mixed organo-magnesium compounds, i, 605.
- method of preparing sulphinones, i, 1030.
- Berthelot, A.**, and **G. Amoureux**, presence of pyruvic acid in the contents of the intestine, i, 910.
- influence of sodium pyruvate on phosphorescent bacteria, i, 916.
- Berthelot, A.**, and **E. Ossart**, influence of media containing bile on the chemical composition of *Bacillus subtilis*, i, 1385.
- Berthelot, A.**, and **R. Pouiso**, presence of pyruvic acid in cultures of certain *Mucors*, i, 917.
- Berthelot, A.**, and **P. Séguin**, culture of spirochaetes in media containing sodium pyruvate, i, 916.
- Berthelot, D.** [cellular disintegration], i, 348.
- chemical aspect of theories of quanta, and thermodynamics of photochemical reactions, ii, 320.
- Bertho, A.**, decomposition of phenyl-azoimide in benzene and in *p*-xylene, i, 953.
- Berthoud, A.**, kinetics of the photosynthesis of hydrochloric acid, ii, 326.
- Berthoud, A.**, and **H. Bellenot**, photochemical reaction between bromine or iodine and potassium oxalate, ii, 327.
- Bertiaux**, rapid electrolytic analysis in an apparatus with a rotatory anode, ii, 695.
- Bertolo, P.**, diacetyl compound of desmotropo-artemisin, i, 304.
- Bertrand, G.**, transportation of copper in the gaseous state, and copper carbonyl, ii, 47.
- micro-determination of silicon and its concentration in certain organs, ii, 872.
- Bertrand, G.**, and **B. Benzon**, importance of zinc in the nutrition of animals; experiments on mice, i, 686.
- importance of zinc in the feeding of animals, i, 789.
- Bertrand, G.**, and (*Miss*) **Y. Djouritch**, new crystalline chromogen, esculetol, extracted from horse chestnuts, i, 813.
- Bertrand, G.**, and **M. Mokragatz**, the quantitative separation from a complex mixture of very small quantities of copper, zinc, nickel, and cobalt, ii, 62.
- Bertrand, G.**, and **H. Nakamura**, comparative physiological importance of iron and zinc, i, 1151.
- Bertrand, G.**, and **A. Seidell**, the separation of the antineuritic vitamin by means of its picrate, i, 234.
- Besler, E.** See **B. Helferich**.
- Best, C. H.**, and **J. J. R. Macleod**, chemical reactions of insulin, i, 898.
- Best, C. H.**, and **D. A. Scott**, possible sources of insulin, i, 108.
- preparation of insulin, i, 108.
- Beste, H.** See **G. Jander**.
- Bestehorn, H.** See **K. Feist**.
- Bethe, A.**, **H. Bethe**, and **Y. Terada**, theory of dialysis, ii, 835.
- Bethe, H.** See **A. Bethe**.
- Bethke, R. M.**, and **H. Steenbock**, metabolism of *l*-pyrrolidonecarboxylic acid and its stability to acids and alkalis, i, 451.
- Bethke, R. M.**, **H. Steenbock**, and **M. T. Nelson**, fat-soluble vitamins. XV. Calcium and phosphorus relations to growth and composition of blood and bone with varying vitamin intake, i, 454.
- Bettinazzi, T.** See **G. Charrier**.

- Benmer, H.**, and **F. Lehmann**, cholesterol synthesis in the animal body, i, 787.
- Beyersdorfer, P.**, and **W. Hess**, action of ultra-violet radiations on solutions of sucrose, i, 1287.
- Beyma thoe Kingma, van.** See **R. Falck**.
- Beythien, A.**, **H. Hempel**, and **C. Wiesemann**, determination of acetaldehyde, ii, 876.
- Bezssonoff, N.**, the reaction proposed by Jendrassik as characteristic of vitamin-B, and its relation with the phenolic grouping, i, 588.
additional requirement for the test with the reagent for vitamin-C, i, 686.
necessary conditions for testing with the reagent for vitamin-C, i, 789.
- Bezssonoff, N.** See also **G. Truffaut**.
- Bhatnagar, S. S.**, **K. K. Mathur**, and **D. L. Shrivastava**, mechanical condition of coagula and its bearing on the theory of complete coagulation, ii, 395.
- Bhatnagar, S. S.**, and **M. Prasad**, electrical conductivity of certain univalent salts of the higher fatty acids in non-aqueous solutions and in the fused state, ii, 525.
- Bhatnagar, S. S.**, and **D. L. Shrivastava**, optical inactivity of active sugars in the adsorbed state. I, i, 942.
- Biancani, E.**, and **H. Biancani**, action of some physical and chemical agents on the mobility of ciliated infusoria, i, 591.
- Biancani, H.** See **E. Biancani**.
- Biazzo, R.**, determination of the acetyl value of fats, ii, 708.
- Bickel, A.**, and **J. A. Collazo**, mechanism of the action of insulin; the carbohydrate balance in avitaminosis, i, 786.
- Bidwell, C. C.**, electrical resistance and thermo-electric power of the alkali metals, ii, 293.
- Bidwell, G. L.** See **M. R. Coe**.
- Biéchy, T.**, can measurements of enzyme action be employed for ascertaining the vitality of important cultivated plants? i, 1276.
- Biedermann, W.**, fermentation of non-ferments, i, 465.
nature and significance of the lipoids of protoplasm, i, 1133.
- Biedermann, W.**, and **C. Jernakov**, hydrolysis of starch by salts III. Hydrolysis by inorganic catalysts (artificial oxydases), i, 1288.
- Biehler, W.** See **R. Engeland**.
- Bielich, F.** See **F. Arndt**.
- Bierry, H.**, and (*Mlle.*) **L. Moquet**, determination of ketonic compounds and of β -hydroxybutyric acid in diabetic urine, ii, 429.
- Bierry, H.**, and **A. Ranc**, action of ultra-violet light on lævulose; production of carbon monoxide and formaldehyde, i, 945.
- Biesalski, E.**, pyrogenic formation of carbonyl chloride, ii, 474.
- Bigiavi, D.**, and **B. de Benedetti**, oxidation of benzeneazoquinol, i, 1000.
- Bigiavi, D.**, and **M. Marri**, reactions of cinnamalphenylnitron, i, 518.
- Bigiavi, D.**, and **R. Poggi**, *o*-hydroxy-azoxy-compounds, i, 574.
- Biginelli, P.**, detection of picric acid and its reduction products in toxicology, ii, 630.
- Bigwood, E. J.**, calcium-ion concentration of blood plasma, i, 680.
deficiency of calcium ions in the blood of epileptics, i, 1137.
- Bigwood, E. J.**, and **W. S. Ladd**, the qualitative tests for acetone bodies: their significance and value, ii, 210.
- Billmann, E.**, measurement of hydrogen-ion concentration in soil by means of the quinhydrone electrode, i, 819.
oxidation and reduction potentials of organic compounds, ii, 596.
- Billmann, E.**, and **J. H. Blom**, electro-metric studies on azo- and hydrazo-compounds, i, 1353.
- Billmann, E.**, and **N. V. Due**, action of triphenylmethyl chloride on free sulphydro-groups, i, 611.
- Billmann, E.**, and **I. Krarup**, temperature coefficient of the quinhydrone electrode, ii, 742.
- Billmann, E.**, and **E. Rimbert**, the action of hypobromous acid on phenol and some phenol derivatives, i, 35.
hypobromous acid and the determination of hypobromous acid and bromic acid, ii, 35.
- Bijvoet, J. M.** See **N. H. Kolkmeijer**.
- Bildsten, N. V.**, micro-determination of methyl alcohol in blood, ii, 506.
- Bildsten, N. V.** See also **E. M. P. Widmark**.
- Bills, C. E.**, and **D. I. Macht**, quantitative protozoöcidal comparison of some opium alkaloids, i, 798.
- Biltz, H.** and **Thaddäus, Köhler**, 5-benzoylbarbituric acids, i, 210.
- Biltz, H.**, and **E. Kremer**, interaction of ethyl diazoacetate and allozan, i, 567.
- Biltz, H.**, and **H. Schander**, oxidation of uric acid, i, 569.

- Biltz, H.**, and **K. Sedlatzschek**, 5-nitro-barbituric acids, i, 429.
ethylated uric acids, i, 431.
- Biltz, M.** See **R. Wintgen**.
- Biltz, W.**, systematic doctrine of affinity. XXIV. The power of crystallised salts to combine with ammonia, ii, 167.
systematic doctrine of affinity. XXIX. Relation of affinity and valency and the constitution of intermetallic compounds, ii, 482.
systematic doctrine of affinity. XXVIII. Heats of formation of intermetallic compounds. V. Cobalt-aluminium, copper-zinc, and copper-tin alloys, ii, 491.
temperature coefficients of electrical conductors, ii, 515.
molten electrolytes, Born's grating forces, and the constitution of salts, ii, 548.
- Biltz, W.**, and **E. Birk**, Kopp's law applied to crystalline substances and isomolar complex compounds, ii, 489.
- Biltz, W.**, and **H. Friedrich**, tellurium, ii, 604.
- Biltz, W.**, and **C. Haase**, heat of formation of intermetallic compounds, ii, 17.
- Biltz, W.**, and **W. Klemm**, the electrolytic conductivity of molten scandium chloride, ii, 184.
- Biltz, W.**, and **E. Meinecke**, systematic doctrine of affinity. XXV. The behaviour of certain halides with respect to halogen, ii, 165.
- Biltz, W.**, and **C. Messerknecht**, zinc halide ammines, ii, 45.
- Biltz, W.**, and **H. Pieper**, systematic doctrine of affinity. XXVII. Heats of formation of intermetallic compounds. IV. Cerium alloys, ii, 487.
- Biltz, W.**, and **W. Röhrs**, the relative solubilities of the calcium and magnesium salts of the higher fatty acids, i, 260.
- Biltz, W.**, and **W. Wagner**, systematic doctrine of affinity. XXVI. Heats of formation of intermetallic compounds. III. Calcium alloys, ii, 482.
- Biltz, W.** See also **A. Voigt**.
- Binaghi, R.**, action of polyhalogenated derivatives of methane and ethane on magnesyl [magnesium alkyl] compounds. III., i, 340.
- Binaghi, R.** See also **B. Oddo**.
- Bing, H. I.**, and **H. Heckscher**, lipæmia. I. Micro-determination of blood fat, i, 1258.
lipæmia. II. Blood fat in normal human subjects, i, 1258.
- Bing, H. I.**, and **H. Heckscher**, lipæmia. III. Pathological changes in the blood-fat value, i, 1259.
- Bingel, J.**, photoelectric effects in rock salt crystals, ii, 224.
- Bingham, E. C.**, and **S. B. Stone**, fluidity relationships in the system, nitric acid, sulphuric acid, and water, ii, 21.
- Binz, A.**, **C. Bâth**, and **E. Walter**, sulfoxyl compounds. XIII. Reduction of aldehyde-sulfoxylates, i, 1160.
- Bircher, S. J.**, and **W. D. Harkins**, effect of pressure on overvoltage, ii, 88.
- Bircumshaw, L. L.** See **U. R. Evans**.
- Birge, R. T.**, spectral series of divalent elements, ii, 281.
active nitrogen, ii, 803.
- Birge, R. T.** See also **F. S. Brackett**, and **J. J. Hopfield**.
- Birk, E.** See **W. Biltz**.
- Biro, S.**, conversion of urobilinogen into urobilin, i, 1136.
- Bischoff, F.**, and **H. Adkins**, the alkyl titanates, i, 259.
- Bishop, W. B. S.**, preparation of ethyl ether by Williamson's method, i, 363.
- Bistrzycki, A.**, and **A. Traub**, sulphur as the bridge atom in the middle ring of some anthracene derivatives, i, 1333.
- Biswas, S. C.** See **J. C. Ghosh**.
- Biswas, A. C.** See **B. K. Singh**.
- Bith, H.** See **M. Labbé**.
- Bitter, J.** See **E. Berl**.
- Bittner, K.** See **R. Pummerer**.
- Bjerrum, N.**, osmotic pressure of electrolytes, ii, 24.
theory of the velocity of chemical reactions, ii, 240.
- Björkman, C. B.** See **E. Häggglund**.
- Black, A.** See **H. Steenbock**.
- Blackett, P. M. S.**, angular momentum and electron impact, ii, 289.
- Blacktin, S. C.** See **P. G. Tryhorn**.
- Blagoveschenski, A. V.**, specific action of plant proteases, i, 1384.
- Blaikie, K. G.**, and **W. H. Perkin, jun.**, the methoxyindoles and their derivatives, i, 547.
- Blair, A. W.**, and **A. L. Prince**, influence of varying ratios of phosphoric acid and potash on crop yield and nitrogen recovery, i, 1022.
- Blair, E. W.**, **W. Ledbury**, and **T. S. Wheeler**, action of ozone on hydrocarbons with special reference to the production of formaldehyde. III. Action of ozone on *n*-hexane, i, 1277.
action of bromine on *n*-hexane, i, 1277.

- Blair, E. W.** See also *T. S. Wheeler*.
Blair, J. S., and J. M. Braham, preparation of guanidinium salts from calcium cyanamide, i, 1051.
Blaise, E. E., and A. Cornillot, [partial] synthesis of 2-*n*-butylpyrrolidine, i, 760.
 synthesis of 2-*n*-butylpyrrolidine, i, 760.
Blanchetière, A., constitution of the anhydrides of glutamic acid, i, 1290.
 iodometric determination of cuprous oxide in presence of the cupric ion; application to the determination of reducing sugars, ii, 786.
Blank, E., and F. Giesecke, mono- and di-methylolcarbamide; their effect on plant growth, and their decomposition in the soil, i, 478.
Blank, E., and H. Petersen, weathering of granite, ii, 406.
Blank, E., and F. Alten, effect of titanium on plant growth, i, 1275.
Blasdale, W. C., equilibria in solutions containing mixtures of salts. III. System, water and the chlorides and carbonates of sodium and potassium at 25°. IV. System, water and the sulphates and carbonates of sodium and potassium at 25°, ii, 106.
Blatherwick, N. R., and M. L. Long, urinary acidity. II. The increased acidity produced by eating prunes and cranberries, i, 121.
Bleesen, M., substitution of Borchers' metal for platinum in electro-analysis, ii, 198.
Bleicher, P. A. See *T. Curtius*.
Blench, E. A., and W. E. Garner, heat of adsorption of oxygen by charcoal, ii, 537.
Blencke, W. See *R. Fricke*.
Blessing, G. See *J. von Braun*.
Blicke, F. F., triphenylmethyl fluoride, i, 845.
Bloch, E. See *L. Bloch*.
Bloch, L., and E. Bloch, new extension of spark spectra of tin and zinc in the Schumann region, ii, 4.
 spark spectra of higher order associated with mercury, ii, 78.
 extension of the spark spectra of lead, bismuth, antimony, and thallium to the extreme ultra-violet, ii, 133.
Bloch, L., E. Bloch, and G. Déjardin, higher order spark spectra, ii, 286.
Blom, J. H. See *E. Biilmann*.
Blood, P. T., carbohydrate reserves of young apple trees as influenced by winter storage, i, 1020.
Bloomfield, G. See *J. M. Nelson*.
Bloor, W. R., fatty acids of blood plasma. II. Distribution of unsaturated acids, i, 782.
Bloor, W. R. See also *W. M. Sperry*.
Bloxson, A. P. See *H. B. Weiser*.
Blüh, O., existence of dual ions, ii, 658.
 dielectric constants of solutions of electrolytes, ii, 824.
Blüh, O. See also *R. Fürth*.
Blum, L., and A. Klotz, content of calcium and magnesium in cancerous blood, i, 1137.
Blunt, K. See *L. McLaughlin*.
Bly, R. S. See *W. L. Lewis*.
Boas, M. A., method for estimating the retention of calcium and phosphorus in young growing rats, i, 789.
Bobko, E., method for sterile cultures of the higher plants, i, 598.
Bock, A. V., H. Field, and G. S. Adair, oxygen and carbon dioxide dissociation curves of human blood, i, 780.
Bock, A. V. See also *L. J. Henderson*.
Bock, J. C., use of formaldehyde for the preservation of blood specimens, i, 682.
Bock, O. See *L. Wöhler*.
Bockmühl, M. See *Farbwerke vorm. Meister, Lucius, & Brüning*.
Bockstahler, L. J. See *K. K. Smith*.
Bodansky, A., milk-coagulating enzyme of *Solanum elaeagnifolium*, i, 1269.
Bodansky, M., effect of chloroform and phosphorus poisoning on carbohydrate tolerance, i, 462.
 action of hydrazine and some of its derivatives in producing liver injury as measured by the effect on levulose tolerance, i, 462.
 production of hypoglycæmia in experimental derangements of the liver, i, 585.
 effect of compounds related to hydrazine in producing anhydramia and experimental anæmia, i, 689.
Bodansky, M. See also *B. M. Hendrix*.
Bode, K. See *R. Ruer*.
Bodenstein, M., rate of dissociation of bromine molecules, ii, 745.
Bodfors, S., toxic properties of methyl alcohol, i, 604.
 mechanism of phenylhydrazine formation, i, 858.
Bodfors, S., and A. Guthe, constitution of salipyrine, i, 770.
Bodin. See *G. Reboul*.
Bodine, T. H., physiological actions of cyanides, i, 1261.
Bodländer, E. See *F. Auerbach*.
Bødtker, E., sebatic acid, i, 610.
Bødtker, E., and O. Rambech, derivatives of tetrahydro- and decahydro-naphthalenes, i, 844.

- Böeseke, J.**, the conditions of equilibrium and motion of molecules in space, i, 156.
the configuration of cyclic 1:2-diols, i, 162.
- Böeseke, J.**, and **H. Gelissen**, trichloroacrylic acid and some of its derivatives. III. Peroxide of trichloroacrylic acid, i, 1162.
- Böeseke, J.**, and **P. H. Hermans**, equilibria between some glycols and their acetone compounds, i, 257.
configuration of the hydrobenzoins in connexion with the situation of the hydroxyl groups in space, i, 729.
- Böeseke, J.**, and **J. Meulenhoff**, complex boric acid compounds and the optically active boron atom, i, 776.
- Böhm, J.**, and **H. Nielsesen**, amorphous precipitates and crystalline sols, ii, 310.
- Boehm, T.** See **K. W. Rosenmund**.
- Böhme, E.** See **H. Pauly**.
- Boehringer & Söhne, C. F.**, derivatives of *p*-substituted phenylcarbamides, i, 1060.
N-substituted derivatives of aminobenzoic acid, i, 1066.
additive compounds of cholic acid, i, 1071.
- Bömer, A.**, and **H. Mattis**, solanine content of potatoes, i, 813.
- Bömer, A.**, and **K. Schneider**, glycerides of fats and oils. XI. Glycerides of palm kernel oil, i, 608.
- Boer, J. H. de**, colour reaction for zirconium and fluorine, ii, 705.
- Boer, J. H. de**. See also **H. J. Backer**.
- Böttger, F.** See **J. Marcusson**.
- Böttger, W.**, distillation of arsenious, antimonious, and stannic chlorides, ii, 333.
- Böttger, W.**, and **K. O. Schmidt**, titration of silver and halogen ions using dyes as indicators, ii, 776.
- Bogert, M. T.**, and **F. H. Bergeim**, constitution of Columbia-yellow (chloramine-yellow), i, 1240.
- Bogert, M. T.**, and **H. Clark**, quinazolines. XXXV. Stereoisomeric styryl derivatives of some 4-quinazoline alkylidides, and their bearing upon the problem of photosensitising dyes, i, 770.
- Bogert, M. T.**, and **H. H. Hopkins**, selenium organic compounds. III. Preparation of a selenium derivative of cinchophen type, i, 1004.
selenium organic compounds. IV. Synthesis of benzobis-selenazoles and selenazobenzothiazoles; new heterocyclic systems, i, 1241.
- Bogert, M. T.**, and **M. R. Mandelbaum**, action of sulphur on *p*-toluidine in the presence of litharge; thio-*p*-toluidine, its constitution and some of its derivatives, i, 166.
- Bogert, M. T.**, and **F. P. Nabenhauer**, quinazolines. XXXVI. A quinazoline analogue of cinchophen (atophan); synthesis of new quinazolinecarboxylic acids from isatin and from *o*-aminoacetophenone, i, 993.
quinazolines. XXXVII. Behaviour of phthalic anhydride with the reactive methyl groups of certain quinazolines, i, 1238.
- Bogert, M. T.**, and **P. S. Nisson**, terephthalic acid derivatives, i, 1315.
synthesis of terephthal-green and terephthal-brilliant-green from cymene, i, 1352.
- Bogert, M. T.**, and **E. M. Slocum**, preparation of various aliphatic halides and halohydrin compounds, i, 603.
- Bogert, M. T.**, and **F. D. Snell**, thiazoles. IV. The synthesis of benzthiazoles from *o*-nitrochlorobenzene, i, 772.
- Boggio-Lera**. See **A. Piutti**.
- Bohne, A.** See **A. Windaus**.
- Bohner, H.** See **G. Tammann**.
- Bohnson, V. L.**, and **A. C. Robertson**, catalytic decomposition of hydrogen peroxide by ferric salts. II, ii, 29.
promoter action in homogeneous catalysis. I. Copper salts as promoters in the iron salt catalysis of hydrogen peroxide, ii, 29.
- Bohr, N.**, the quantum theory of line spectra, ii, 77.
- Bohr, N.**, **H. A. Kramers**, and **J. C. Slater**, quantum theory of radiation, ii, 433, 509.
- Bois, E. F. du**, clinical calorimetry. XXXV. A graphical representation of the respiratory quotient and the percentage of calories from protein, fat, and carbohydrate, i, 682.
- Bois-Reymond, E. du**. See **H. Handovsky**.
- Bokkel Huinink, G. A. ten**. See **I. Lifschitz**.
- Bokorny, T.**, water cultures containing benzoic acid; assimilation of benzoic acid by culture plants, i, 698.
- Bolle, J.** See **P. Chuit**.
- Bollen, W. B.** See **W. V. Halversen**.
- Bolser, C. E.**, and **E. B. Hartshorn**, the reaction of carbon disulphide on *p*-phenylenediamine, i, 317.
- Bom, T. van der**. See **C. Dhéré**.

- Bomford, R. F.** See *T. W. J. Taylor*.
- Bonardi, J. P.** See *R. B. Moore*.
- Bonazzi, A.**, nitrification. V. Mechanism of ammonia oxidation, i, 1023.
- Bone, W. A., D. M. Newitt, and D. T. A. Townsend**, gaseous combustion at high pressures. III. Energy-absorbing function and activation of nitrogen in the combustion of carbon monoxide, ii, 398.
- gaseous combustion at high pressures. IV. Influence of varying initial pressures upon the rate of pressure development and the activation of nitrogen in carbon monoxide-air explosions, ii, 398.
- Bongard, G. R.** See *E. G. R. Ardagh*.
- Bongards, H.**, cosmic origin of the radioactive substances in the atmosphere, ii, 446.
- Bonnet, R.** See *E. F. Terroine*.
- Bonomi, G.** See *G. Charrier*.
- Booher, L. E.** See *V. C. Myers*.
- Book, G., and J. Eggert**, the photo-chlorination of toluene, ii, 10.
- Boord, C. E.** See *L. B. Sebrrell*.
- Borelius, G., and F. Gunneson**, temperature periods in the emission of occluded gases from iron, ii, 187.
- Borinski, W.** See *J. Eggert*.
- Borisov, P.** See *N. D. Zelinski*.
- Born, M., and W. Heisenberg**, quantum theory of molecules, ii, 365.
- influence of ionic deformations on optical and chemical constants. I, ii, 434.
- Borovic, S., and W. Pavlov**, production of a luminous discharge in a gas by very small differences of potential, ii, 374.
- Borsche, W.**, 4:6-dinitroisophthalaldehyde, i, 182.
- constitution of the bile acids. VII. A ketone, $C_{22}H_{32}O$, from deoxy-bilanic acid, i, 1201.
- constitution of the bile acids. VIII. Acylation of cholic acid, i, 1202.
- Borsche, W., and I. Exss**, the activation of halogen and methyl in aromatic compounds by the azo-group, $\cdot N:NR$, i, 218.
- Borsche, W., and R. Frank**, bile acids. VI. Condensation of some ketonic acids of the cholic acid group with aromatic aldehydes and with isatin, i, 1200.
- Borsche, W., and G. John**, hydrindene. II, i, 723.
- Borsche, W., and E. Lange**, chlorination of decalin [decahydronaphthalene]. I, i, 32.
- Borsche, W., and B. Schacke**, substitution products of diphenylene oxide. II, i, 161.
- Borsche, W., H. Weussmann, and A. Fritzsche**, isatin and related compounds. V. Nitroisatins, i, 986.
- isatin and related compounds. VI. 5-Iodoisatin and 5:5'-di-iodoindigotin, i, 1342.
- Borsook, H.** See *A. Hunter*.
- Bosanquet, C. H., and T. C. Keeley**, search for element number 43, ii, 651.
- Bosshard, E.**, apparatus for the analysis of "oleum" and other fuming liquids, ii, 344.
- Bosshard, E., and E. Furrer**, analysis of sodium peroxide, ii, 568.
- Bothe, W.**, interaction between radiation and free electrons, ii, 362.
- differentiation of radium, mesothorium, and radiothorium by γ -rays, ii, 446.
- Botteri, J. H.**, echinococcal anaphylaxis, i, 793.
- Boudouard, O., and J. Lefranc**, clays. V. Action of heat, ii, 186.
- Boulez, V.**, esterification by dilution in inert media, ii, 430.
- Bouma, J. A. L.**, determination of eugenol in clove oil, ii, 356.
- Bouman, N.**, the electrochemical behaviour of chromium, ii, 150.
- Bourgom, A.**, methylal as a solvent, ii, 590.
- Bourguet**, action of sodamide on true acetylene hydrocarbons, i, 481.
- partial dehydration of aldehydes and ketones forming acetylenic hydrocarbons, i, 701.
- transformation of acetylenic hydrocarbons by means of sodamide, i, 1027.
- Bourion, F., and E. Rouyer**, ebullioscopy of double salts of mercuric chloride with alkali chlorides, ii, 112.
- ebullioscopic study of the formation of double salts between mercuric cyanide and the halides of the alkali and alkaline-earth metals, ii, 476.
- order of reaction of the reduction of mercuric chloride by sodium formate, ii, 613.
- Bourne, W., and R. L. Stehle**, excretion of phosphoric acid during anaesthesia, i, 1258.
- Bourne, W.** See also *R. L. Stehle*.
- Bourneuf, M.**, action of halogen derivatives of phosphorus on some phenolic bases, i, 339.
- Boussu, R.** See *C. Chéneveau*.

- Boutaric, A., E. Chauvenet, and (Mlle.) Y. Nabot**, determination of molecular weights of sodium salts by cryoscopy in fused, hydrated sodium thiosulphate, ii, 254.
- Boutaric, A., and (Mlle.) G. Peneau**, protective effect on suspensions of the addition of quantities of electrolytes too small to cause flocculation, ii, 595.
- Boutaric, A., and R. Simonet**, densities and viscosities of arsenic trisulphide sols, ii, 660.
- Boutaric, A., and M. Vuillaume**, influence on the properties of arsenic sulphide sols of some physical factors intervening during their preparation, ii, 405.
- Bouzat, A., and L. Azinières**, composition of chlorine hydrate, ii, 103.
- Bouzat, A., and E. Chauvenet**, heats of solution and of formation of the double chlorides, $\text{CuCl}_2, 2\text{KCl}, 2\text{H}_2\text{O}$; $\text{CuCl}_2, 2\text{RbCl}, 2\text{H}_2\text{O}$; $\text{CuCl}_2, 2\text{CsCl}, 2\text{H}_2\text{O}$; and of the corresponding anhydrous salts, ii, 19.
- Bouzat, A., and G. Leluan**, determination of the boiling point of bromine, ii, 247.
- Bovalini, E.** See *U. Sborgi*.
- Bovis, P.**, absorption spectrum of [liquid] bromine, ii, 712.
- Bowen, A. R.** See *G. T. Morgan*.
- Bowen, E. J.**, photochemistry of the halogen hydrides, ii, 540.
- Bowen, E. J., H. Hartley, W. D. Scott, and H. G. Watts**, rate of photochemical change in solids, ii, 539.
- Bowen, I. S., and R. A. Millikan**, series spectra of the stripped boron atom (B^{III}), ii, 437.
- fine structure of the nitrogen, oxygen, and fluorine lines in the extreme ultra-violet, ii, 638.
- extension of the X-ray doublet laws into the field of optics, ii, 710.
- Bowen, I. S.** See also *R. A. Millikan*.
- Bowen, N. L., and J. W. Greig**, the system, aluminium oxide-silica, ii, 488.
- Bowen, N. L., J. W. Greig, and E. G. Zies**, mullite, ii, 416.
- Bowers, E. H.** See *F. O. Anderegg*.
- Boyce, J. C.**, soft X-rays from heavy elements, tantalum to gold, ii, 438.
- Boyd, D. R., and F. J. Smith**, formation of triphenylmethylphosphinic acid from triphenylmethoxyphosphorus dichloride, i, 1121.
- Bozorth, R. M.**, solubility of potassium perchlorate in salt solutions and the corresponding activity relations, ii, 42.
- Bozza, G.** See *L. Cambi*.
- Brackett, F. S., and R. T. Birge**, quantum defect and the new Bohr theory of atomic structure, ii, 281.
- Bradfield, A. E.** See *K. J. P. Orton*.
- Bradfield, R.**, nature of the activity of the colloidal clay of acid soils, i, 479.
- importance of hydrogen-ion concentration control in physico-chemical studies of heavy soils, i, 927.
- effect of the concentration of colloidal clay on its hydrogen-ion concentration, ii, 237.
- chemical nature of a colloidal clay, ii, 616.
- Bradford, S. C.**, simple electric thermostat, ii, 469.
- simple non-splash ring for use with Scheibler's desiccators, ii, 670.
- Bradley, A. J.**, crystal structure of metallic arsenic, ii, 382.
- crystal structure of the rhombohedral forms of selenium and tellurium, ii, 817.
- Bradley, H. C.** See *K. K. Chen, and A. B. Hertzman*.
- Brady, O. L., and F. P. Dunn**, isomerism of the oximes. XV. The alleged fourth benzildioxime, i, 292.
- Brady, O. L., and H. J. Grayson**, isomerism of the oximes. XIX. Substituted cinnamaldoximes, i, 1076.
- Brady, O. L., and G. P. McHugh**, isomerism of the oximes. XVI. Action of ultra-violet light on aldoximes and their derivatives, i, 516.
- Brady, O. L., and L. B. Manjunath**, isomerism of the oximes. XVII. Some bromo- and nitro-substituted mono- and di-methoxybenzaldoximes, i, 740.
- Brady, O. L., and R. Truszkowski**, isomerism of the oximes. XVIII. Action of chloro-2:4-dinitrobenzene on some isomeric aldoximes, i, 741.
- Braecke, M.**, glucoside hydrolysable by emulsin in the genera, *Veronica*, *Euphrasia*, *Odontites*, *Bartsia*, and *Pentstemon*, i, 1273.
- Bragg, (Sir) W. H.**, X-ray examination of metal films, ii, 381.
- carbon atom in crystalline structure, ii, 817.
- Bragg, (Sir) W. H., and G. T. Morgan**, crystal structure and chemical constitution of basic beryllium acetate and propionate, i, 7.
- Bragg, W. L.**, the structure of aragonite, ii, 109.
- refractive indices of calcite and aragonite, ii, 373.

- Braham, J. M.** See *J. S. Blair*, and *K. D. Jacob*.
Branch, G. E. K., and *W. W. Hall*, oxidation of carbazole by silver oxide, i, 550.
Brand, E. See *M. Bergmann*.
Brand, K., and *L. W. Berlin*, reduction of organic halogen compounds. VII. 3-Phenyl-1-diphenylmethylenesulfide, i, 720.
Brand, K., and *W. Groebe*, thiophenols. VIII. 5-Chloro-2-methylthioltriphenylcarbinols, i, 1063.
Brand, K., and *P. Grobel*, thiophenols. V. Salts and additive compounds of *oo'*-azophenyl methyl sulphide and *oo'*-azoxyphenyl methyl sulphide, i, 219.
Brand, K., and *F. Schläger*, the diphenylsuccinene series. V. Colourless and coloured 9:12-dialkyl- $\Delta^9,11$ -diphenylsuccindienes, i, 157.
Brand, K., and *O. Stallmann*, thiophenols. VI. Thiophenol ethers of triphenylmethane and the bathochromic action of alkylthiol groups, i, 851.
Brand, K., and *H. Stein*, thiophenols. IX. *o*-Ethylthioltriphenylcarbinols, i, 1064.
Brand, K., and *K. Trebing*, the diphenylsuccinene series. VI. 9:12-Dinaphthyl derivatives of the diphenylsuccinene series, i, 157.
Brand, K., and *W. Vogt*, thiophenols. VII. Simple method of preparing *p*-methylthiol- and *pp'*-dimethylthioltriphenylcarbinols, i, 852.
Brandt, A., difference between the specific heats of liquid and vapour at constant volume, ii, 239.
 connexion between van der Waals' equation and Trouton's rule, ii, 232.
 cohesion pressure, ii, 232.
 latent heat of evaporation and pressure of saturated vapour at very low temperatures, ii, 232.
 thermodynamic surface of water, ii, 240.
 heat of evaporation and tension of saturated steam at temperatures close to absolute zero, ii, 529.
Brandt, L., volumetric determination of iron by Knecht and Hibbert's titanous chloride method, ii, 426.
Brandt, P. See *M. Battagay*.
Branner, H., and *O. Kahn*, mobility of ions in solid cuprous sulphide, ii, 827.
Brass, K., dyestuffs of the phenanthrene series, i, 407.
Brass, K., *E. Ferber*, and *J. Stadler*, azido-, aminohydroxy-, and dihydroxy-phenanthraquinones. I., i, 407.
Brass, K., and *K. Heide*, linear and angular diphthaloylthianthrens, i, 414.
Brass, K., and *J. Stadler*, azido-, aminohydroxy-, and dihydroxy-phenanthraquinones. II., i, 408.
Bratke, H. See *J. Meyer*.
Branchli, E. See *E. Wasser*.
Braun, H., *A. Stamatelakis*, and *S. Kondo*, metabolism of acid-fast bacteria. I., i, 804.
Braun, J. von [with *O. Braunsdorf*, *P. Engelbertz*, *E. Hahn*, *G. Hahn*, *O. Hainbach*, *W. Kredel*, and *K. Larbig*], benzopolymethylene compounds. X. Oxidative degradation of tetrahydronaphthalene and substituted tetrahydronaphthalenes to phthalonic acid and phthalic acids, i, 48.
Braun, J. von, and *O. Bayer*, *o*-hordenine [*o*- β -dimethylaminoethylphenol], i, 849.
Braun, J. von, *O. Bayer*, and *G. Blessing* [with *G. Lemke*], catalytic hydrogenations under pressure in the presence of nickel salts. VIII. Compounds of the indole series, i, 545.
Braun, J. von, *G. Blessing*, and *R. S. Cahn*, new method in the isoquinoline and its ring homologous series, i, 873.
Braun, J. von, *G. Blessing*, and *F. Zobel*, cyclic di-imines and their decomposition. III., i, 426.
Braun, J. von, and *R. S. Cahn*, decomposition of quaternary ammonium hydroxides, i, 632.
Braun, J. von, and *H. Engel*, compounds of the 2-fluorenylmethyl series, i, 383.
 tenacity of organic residues. II., i, 632.
Braun, J. von, *W. Gmelin*, and *A. Petzold* [with *K. Müncker*], 5:6:7:8-tetrahydroquinolines and their derivatives. IV., i, 553.
Braun, J. von, and *R. Gossel*, analogues of citronellol richer and poorer in carbon. I., i, 482.
Braun, J. von, and *G. Hahn*, isatin-4-carboxylic acid, i, 85.
Braun, J. von, and *W. Kaiser*, odour and molecular asymmetry, i, 3.
Braun, J. von, and *G. Lemke*, preparation of pyromellitic acid, i, 644.
Braun, J. von, and *J. Pohl*, cyclic bis-imines and their decomposition. IV. i, 551.
Brauns, D. H., fluoroacetyl derivatives of sugars. II. and III. Optical rotation and atomic dimension, i, 265, 837.
Braunschweig, M. See *H. E. Fierz-David*.

- Braunsdorf, O.** See *J. von Braun*.
- Bray, W. C., and E. J. Cuy,** oxidation of hydrazine. I. Volumetric analysis of hydrazine by the iodic acid, iodine, bromine, and hypochlorous acid methods, ii, 423.
- Bray, W. C., and H. E. Miller,** standardisation of thiosulphate solution by the permanganate-iodide and dichromate-iodide methods, ii, 870.
- Bray, W. C.** See also *E. J. Cuy*.
- Bray, W. W.** See *L. A. Congdon*.
- Breazeale, J. F.,** absorption of carbon by the roots of plants, i, 476.
- Breckpot, R.,** the reaction between nitriles and organo-magnesium compounds; ethyl cyanoacetate, i, 272. synthesis of some new β -amino-acids, esters, and alcohols, i, 377.
- Bredemeier, H.** See *G. Tammann*.
- Bredig, G., and A. von Goldenberg,** determination of carbonyl chloride in gas mixtures, ii, 701.
- Bredt, J.,** formation of diketocamphane (ketocamphor) and of diketofenchane (ketofenchone) by the oxidation of camphor and fenchone with chromic acid, i, 408.
- Bredt, J., H. Thonet, and J. Schmitz,** steric hindrance in bridged rings (Bredt's rule) and the *meso-trans*-position in condensed cyclohexane ring systems, i, 643.
- Bredt-Savelsberg, M., C. A. Heine-mann, P. Catharinus, and H. Eibel,** enolisation of camphor, i, 530.
- Brefeld, W.** See *O. Warburg*.
- Breimayer, C.** See *H. Remy*.
- Breisch, K.,** electrolytic precipitation of zinc from alkaline solution and its application to rapid separations from other metals, ii, 568.
- Breisch, K.** See also *K. Chalupny*.
- Breit, G.,** polarisation of resonance radiation, ii, 441. quantum theory of dispersion, ii, 644.
- Breit, G., and H. K. Onnes,** magnetic researches. XXVI. Measurements of magnetic permeabilities of chromium chloride and gadolinium sulphate at the boiling point of liquid hydrogen in alternating fields of frequency 369,000 per second, ii, 294.
- Bremer, G.** See *K. Ziegler*.
- Brenans, P., and C. Prost,** a new iodo-salicylic acid, i, 641. iodinated *m*-hydroxybenzoic acids, i, 641. a new iodo-*p*, hydroxybenzoic acid, i, 641. nitro- and amino-iodohydroxybenzoic acids, i, 965.
- Brennen, J. H.,** adsorption of polonium by colloids, ii, 735.
- Breslin, J. E.** See *B. S. Neuhausen*.
- Bressier, J.** See *Fabrégue*.
- Brewer, A. K.,** ionisation produced in certain gaseous reactions, ii, 745.
- Brezina, O.** See *W. Gerlach*.
- Bridel, M.,** loganin or meliatin? i, 196. nature of the methyl salicylate glucoside present in the bark of *Betula lenta*, i, 659. application of the biochemical method of characterising dextrose to the detection of maltase in malt, ii, 506.
- Bridel, M., and C. Charaux,** orobanchin, a new glucoside, extracted from roots of *Orobancha rapum*, Thuill, i, 976.
- Bridel, M., and J. Charpentier,** biochemical characterisation of galactose in a mixture containing galactose and arabinose, ii, 429.
- Bridel, M., and P. Delauney,** the properties of loroglossin and its products of hydrolysis, dextrose and loroglossigenin, i, 866.
- Bridgman, P. W.,** compressibility and pressure coefficient of resistance of rhodium and iridium, ii, 415. some properties of single metal crystals, ii, 818.
- Briggs, A. P.,** the inorganic elements of blood plasma, ii, 132. colorimetric determination of small amounts of phosphorus, ii, 498.
- Briggs, A. P., I. Koechig, E. A. Doisy, and C. J. Weber,** some changes in the composition of blood due to the injection of insulin, i, 445.
- Briggs, F. N.,** toxicity of copper sulphate to the spores of *Tilletia tritici* (Bjerk.), Winter, i, 911.
- Briggs, G. H.,** distribution of the active deposit of radium in helium and argon in an electric field, ii, 813.
- Briggs, J. R.,** physical chemistry of dyeing: substantive dyes, ii, 394.
- Briggs, S. H. C.,** the valency bond; electrovalence and covalence, ii, 384.
- Briggs, T. R.,** detection of constant-boiling mixtures, ii, 776.
- Briggs, T. R., and V. Migrdichian,** ammonium carbamate equilibrium, ii, 836.
- Briggs, T. R.** See also *E. A. Louder*.
- Brigl, P., and E. Klenk,** phthalic anhydride as a means of hydrolysing proteins, i, 105.
- Brill, R.,** silk fibroin. I, i, 102.
- Brin, J.** See *H. Rupe*.
- Briner, E., P. Ferrero, and E. de Luserna,** catalytic preparation of amines, i, 503.

- Briner, E., J. Hausser, and E. de Luserna**, chlorination of butylene and the properties of dichlorobutane, i, 481.
- Briner, E., R. Patry, and E. de Luserna**, oxidations with ozone. I. The preparation of vanillin, i, 290.
- Briner, E., W. Pfeiffer, and G. Malet**, peroxidation of nitric oxide. III. Increase in velocity of peroxidation of nitric oxide at low temperatures, ii, 471.
- peroxidation of nitric oxide. IV. Action of low temperatures and of certain catalysts on the gases of the nitrifying arc, ii, 471.
- Brinkman, R., and A. von Szent-Györgyi**, lipolytic theory of immune hæmolysis, i, 784.
- physico-chemical basis of vital permeability. IV. Capillary activity of oxygen and of carbon dioxide at the interface light petroleum-water, ii, 235.
- Brinley, F. J.**, colloidal lead arsenate, ii, 259.
- Brinzinger, H.** See *O. Ruff*.
- British Dyestuffs Corporation, Ltd., W. H. Perkin, jun., and G. R. Clemo**, preparation of compounds related to the acridines, i, 874.
- Britton, H. T. S.**, determination of chromium, ii, 351.
- electrometric titration of chromic acid using (a) the hydrogen electrode or (b) the oxygen electrode, ii, 704.
- chromates of thorium and the rare earths. II. Lanthanum, praseodymium, neodymium, and samarium, ii, 763.
- Brodar, A.** See *R. Kremann*.
- Brode, W. R.**, determination of hydrogen-ion concentration by a spectrophotometric method and the absorption spectra of certain indicators, ii, 346.
- Brode, W. R., and R. Adams**, optically active dyes. II. Adsorption, absorption spectra, and rotation, i, 1242.
- Brodersen, J.**, production of Liesegang lines in a capillary space, ii, 595.
- Brodersen, K.** See *O. Mumm*.
- Brodin, P.** See *A. Chauffard*.
- Brodsky, A.**, electrolytic dissociation, temperature, and the solvent, ii, 388.
- method of making hydrogen peroxide from persulphuric acid, ii, 403.
- concentration of weak solutions of hydrogen peroxide by distillation in a vacuum, ii, 404.
- Brönsted, J. N.**, individual thermodynamic properties of ions, ii, 94.
- Brönsted, J. N., and V. K. LaMer**, activity coefficients of ions in very dilute solutions, ii, 306.
- Brönsted, J. N., and K. Pedersen**, catalytic decomposition of nitroamide and its physico-chemical significance, ii, 331.
- Brönsted, J. N., and C. E. Teeter**, kinetic salt effect, ii, 745.
- Brogie, L. de, and A. Dauvillier**, X-ray spectra and atomic structure, ii, 369.
- Compton effect, ii, 581.
- Bronde, L.** See *V. Gulevitch*.
- Bronk, D. W.** See *C. F. Meyer*.
- Brooks, M. M.**, permeability of living and dead cells. III. Penetration of certain alkalis and ammonium salts into living and dead cells, i, 1262.
- permeability of living and dead cells. IV. Penetration of tervalent and quinquevalent arsenic into living and dead cells, i, 1263.
- Brooks, R.**, constant level device for water-baths, ii, 669.
- Brotherton, M.**, emission of electrons under the influence of chemical action, ii, 377.
- Brotherton & Co., Ltd.**, determination of hyposulphite, ii, 56.
- Brough, G. A.** See *H. McGuigan*.
- Brouha, L.** See *H. Fredericq*.
- Brousse.** See *P. Descomps*.
- Browinski, J.**, neutral and oxidised sulphur in the blood, i, 895.
- Brown, A. B., and E. E. Reid**, catalytic alkylation of aniline, i, 1182.
- catalytic dehydration of alcohols, ii, 845.
- catalytic alkylation of ammonia, ii, 845.
- Brown, A. L.** See *C. S. Smith*.
- Brown, E. B., and T. B. Johnson**, catalysis. III. Reduction of uracil to hydrouracil, i, 319.
- catalysis. IV. Behaviour of the amino-group when cytosine and nitrouracil are reduced in the presence of colloidal platinum, i, 567.
- Brown, F. E.**, density and hydration in gelatin sols, ii, 660.
- Brown, F. J.** See *L. A. Congdon*.
- Brown, H. C., J. T. Duncan, and T. Henry**, fermentation of salts of organic acids as an aid to the differentiation of bacterial types, i, 1385.
- Brown, H. D.**, sulphofication in pure and mixed cultures, with special reference to sulphate production, hydrogen-ion concentration, and nitrification, i, 1024.

- Brown, M.** See *G. F. Smith*.
- Brown, O. W.,** and *C. O. Henke*, catalytic activity of tin, ii, 31.
- Brown, O. W.** See also *C. O. Henke*.
- Brown, R. C.,** and *R. E. Kremers*, 3:5-dinitrobenzoates of phenols, i, 168.
- Brown, W. E.,** experiments with anæsthetic gases, propylene, methane, and methyl ether, i, 1261.
- Brown, W. E. L.,** measurement of hydrogen-ion concentrations with glass electrodes, ii, 869.
- Browne, A. W.,** *A. B. Hoel*, *C. W. Mason*, *G. B. L. Smith*, and *F. H. Swezey*, azido-carbon disulphide. I. Formation, preparation, and general properties, ii, 40.
- Browne, A. W.** See also *E. A. Louder*, and *G. B. L. Smith*.
- Browne, F. L.,** heat of coagulation of sulphur hydrosols, ii, 536.
- Browning, C. H.,** *J. B. Cohen*, *S. Ellingworth*, and *R. Gulbransen*, antiseptic action of compounds of the apocyanine, carbocyanine, and isocyanine series, i, 911.
antiseptic action of anil-pyridines and anil-quinolines, i, 990.
- Browning, H. M.** See *E. H. Barton*.
- Brownlee, I.,** optimum temperature of the action of a ferment or lysin, i, 592.
- Bruce, J. R.,** changes in chemical composition of the tissues of the herring in relation to age and maturity, i, 907.
- Brude, G.** See *G. Fester*.
- Brück, L.** See *E. Fromm*.
- Brüggemann, K.** See *A. Reissert*.
- Brüssov, L.** See *S. Nametkin*.
- Brugsch, T.,** and *H. Horsters*, insulin-like compounds. I., i, 1017.
- Brugsch, T.,** and *E. Pollak*, transformation of blood pigment into bile pigment, i, 1127.
- Bruhat, G.,** and *M. Pauthenier*, decomposition of carbon disulphide by ultra-violet rays, ii, 439.
absorption of ultra-violet rays by carbon disulphide, ii, 713.
- Bruhns, G.,** potassium carbonate and potassium hydrogen carbonate as standards [in acidimetry], ii, 270.
- Bruin, T. L. de,** and *P. Zeeman*, spectrum of ionised potassium in connexion with the red and blue spectrum of argon, ii, 637.
- Bruins, H. R.** See *E. Cohen*.
- Brukl, A.,** micro-volumetric determination of arsenic, antimony, and iron, ii, 123.
- Brukl, A.,** preparation of metallic arsenides by the action of arsenic hydride on metallic salt solutions, ii, 251.
- Brukl, A.,** and *M. Behr*, determination of hypophosphorous and phosphorous acids with iodic acid, ii, 566.
- Brukl, A.** See also *L. Moser*.
- Brun, A.,** evolution of iron oxides, ii, 773.
- Brun, J.** See *E. Bamberger*.
- Brunck, R.** See *J. K. Pfaff*.
- Bruni, G.,** and *T. G. Levi*, reactions of certain substituted guanidines with sulphur, i, 216.
method of preparation of organic dithio-acids, i, 964.
synthesis reactions of benzthiazole and its derivatives, i, 1000.
- Brunner, E.** See *A. Skrabal*.
- Brunner, K.,** *W. Seeger*, and *S. Dittrich*, diacylamides. I., i, 1310.
- Brunner, O.** See *E. Späth*.
- Bruno, A.,** extraction of a substance dissolved or dispersed in a liquid by another, immiscible liquid, ii, 418.
- Brus, G.,** catalytic dehydrations and dehydrogenations by means of anhydrous zinc sulphate, i, 2.
- Bruylants, P.,** cyclic trimethylene [cyclopropane] compounds, i, 284.
action of organo-magnesium compounds on nitriles, i, 984.
butenonitriles. IV., i, 1053.
- Bryan, A. B.,** electrical properties of flames containing salt vapours for high-frequency alternating currents, ii, 291.
- Bryan, A. B.** See also *H. A. Wilson*.
- Bubb, F. W.,** direction of ejection of photo-electrons by polarised X-rays, ii, 286.
- Bubeck, H.** See *W. Wislicenus*.
- Buchanan, C.** See *T. S. Patterson*.
- Bucher, A.** See *R. Tobler*.
- Buchman, E.** See *C. Schwarz*.
- Buchner, E. H.,** and *D. Kleyn*, the system, cyclohexane-aniline, i, 503.
- Buck, J. S.,** *R. D. Haworth*, and *W. H. Perkin, jun.*, oxidation of substituted 1-benzyl-3:4-dihydroisoquinolines and a synthesis of papaveraldine, i, 1335.
- Buck, J. S.,** and *W. H. Perkin, jun.*, ψ -epiberberine, i, 1096.
- Budgen, N. F.,** ternary alloy system, aluminium-cadmium-zinc, ii, 684.
- Bücher, W.** See *A. Benrath*.
- Büchi, P. F.,** quantum sensitiveness of uranyl oxalate photolysis, ii, 669.
diffusion potentials, ii, 744.
- Büchi, P. F.** See also *E. Baur*.

- Büdingen, T.**, does dextrose in blood undergo modification by other blood constituents before oxidation in the tissues? i, 113.
- Bühler, K.** See *K. H. Bauer*.
- Buelens, A.**, crotononitriles, i, 152.
- Bülow, C.**, new theory relative to molecular constitution of chemical compounds, ii, 297.
- Bülow, C.**, and *W. Dick*, condensations of acetyl-*p*-phenylenediamine to derivatives of pyrrole and their hydrolytic fission, i, 1233.
- Bülow, C.**, and *E. King*, acetoacetanilide, i, 1179.
- Bülow, C.**, and *F. Seidel*, synthesis of thiobiazolone derivatives, i, 573.
action of pyridine on hydrazono-acid chlorides, i, 674.
reactions of chloroacetone 2:4-dinitrophenylhydrazones, i, 1042.
- Bülow, W.**, oxidation of didiphenylamine, i, 1183.
- Bürki, F.**, the rotation dispersion of camphor, i, 753.
formula for rotation dispersion, ii, 218.
rotatory dispersion of quartz, ii, 286.
- Bütler, R.** See *R. Eder*.
- Buffat, C.** See *F. Kehrmann*, and *J. Piccard*.
- Buisson, H.**, the series of triplets of the arc spectrum of mercury, ii, 365.
- Bulatao, E.**, and *A. J. Carlson*, blood-sugar and gastric hunger contractions, i, 1252.
- Bulger, H. A.** See *J. P. Peters*.
- Bull, F.** See *T. Sabalitschka*.
- Bulliard, P.** See *H. de Diesbach*.
- Bullock, E. R.**, simplicity of mechanism of reaction as one of the factors conditioning catalysis, ii, 242.
- Bungenburg de Jong, H. G.**, a simple continuously acting washing apparatus for the purification of colloidal gels, ii, 27.
- Bungetzianu, D.**, compressibility of liquids and the velocity of sound in liquids, ii, 590.
- Burada, A.**, a complex silver fluoride, i, 203.
- Burd, J. S.**, and *J. C. Martin*, phosphate behaviour in soils, i, 252.
mutual effects on soil and plant induced by added solutes, i, 1022.
secular and seasonal changes in the soil solution, i, 1396.
- Burg, B. van der**, and *C. A. Koppejan*, influence of certain colloids on the titration of chlorides by Volhard's method, ii, 271, 347.
- Burger, H. C.**, and *H. B. Dorgelo*, relation between inner quantum numbers and intensity of [components of] multiplets, ii, 361.
- Burger, H. C.** See also *L. S. Ornstein*.
- Burk, R. E.** See *C. N. Hinshelwood*.
- Burnett, E. S.**, Joule-Thomson effect in carbon dioxide, ii, 821.
- Burns, R. M.** See *J. M. Weiss*.
- Burr, G. O.**, and *R. A. Gortner*, the humin formed by acid hydrolysis of proteins. VIII. Condensation of indole derivatives with aldehydes, i, 762.
- Burrows, G. H.**, the equilibrium between thiocarbamide and ammonium thiocyanate, i, 948.
- Burrows, G. H.** See also *E. S. Wallis*.
- Burrows, G. J.**, and *F. Eastwood*, molecular solution volumes in ethyl alcohol, ii, 453.
- Burrows, G. J.** See also *J. Read*.
- Burrows, R. E.** See *H. Wren*.
- Bursian, V. R.**, conditions of stability of thermodynamical equilibrium and an accurate formulation of the Le Chatelier-Braun principle, ii, 450.
- Burt, F. P.** See *D. H. Bangham*.
- Burt, W.** See (*Sir*) *J. C. Irvine*.
- Burton, E. F.**, forces regulating the size of colloidal particles, ii, 459.
surface tension and fine particles, ii, 731.
- Burton, E. F.**, and *J. E. Currie*, distribution of colloidal particles, ii, 459.
- Burt, A. W.** See *G. T. Morgan*.
- Busacca, A.**, "nitritoid crisis" produced by arsenobenzene derivatives. VI. Experiments on isolated organs with plain muscle, i, 1376.
- Buschmann, W.** See *K. von Auwers*, and *F. Schütz*.
- Buswell, A. M.**, and *W. U. Gallaher*, determination of dissolved oxygen in the presence of iron salts, ii, 56.
- Butcher, B. H.**, Thomas test for ammonia, ii, 870.
- Butkewitsch, W.**, citric acid fermentation, i, 126.
transformation of quinic acid by moulds, i, 804.
- Butler, J. A. V.**, heterogeneous equilibria. I. Conditions at the boundary surface of crystalline solids and application of statistical mechanics, ii, 530.
heterogeneous equilibria. II. Kinetic interpretation of the Nernst theory of electromotive force, ii, 598.

Butler, J. A. V., heterogeneous equilibria. III. Kinetic theory of reversible oxidation potentials at inert electrodes, ii, 598.

heterogeneous equilibria. IV. Solubility of strong electrolytes, ii, 727.

Butler, J. A. V., and **G. P. Davies**, effect of complex formation on oxidation potentials; influence of the cyanide ion on the ferrocyanide-ferriocyanide potential, ii, 665.

Butler, J. A. V. See also **S. R. Carter**.

Butterfass, G. See **W. Wislicenus**.

C.

Cabannes, J., and **A. Lepape**, scattering of light by krypton and xenon, ii, 644.

Cabrera, B., the magnetons of Weiss and of Bohr and the constitution of the atom, ii, 142.

Cadenhead, A. F. G., and **W. H. Vining**, manganese acetate, i, 826. reversible colloid of iron, ii, 557.

Cadora, J. C. [with **R. W. Lamson**], comparative germicidal efficiency of phenol, mercuric chloride, and potassium mercuri-iodide, i, 592.

Căsar, and Schaal, effect of exercise on sugar and residual nitrogen in blood, i, 1123.

Caglioti, V. See **G. Carobbi**.

Cahn, R. S. See **J. von Braun**.

Caille, A., preparation of cellulose acetates, i, 1289.

Calcott, W. S., **F. L. English**, and **F. B. Downing**, analysis of naphthalenesulphonic acids and naphthalene, ii, 208.

Calderwood, H. N., jun., condenser for distilling oils of wide boiling range, ii, 540.

Caldwell, M. L., influence of the new sulphur-containing amino-acid (Mueller) on the activity of pancreatic amylase, i, 799.

Caldwell, M. L. See also **H. C. Sherman**.

Calingaert, G. See **R. T. Haslam**.

Callis, C. A. See **C. A. Kraus**.

Callow, A. B., catalase in bacteria and its relation to anaërobiosis, i, 125. oxygen uptake of bacteria, i, 912.

Callow, R. K. See **N. V. Sidgwick**.

Calthrop, J. E., relation between the refractivities and the sizes of the atoms of certain elements, ii, 372.

Calvin, J. K. See **J. H. Hess**.

Calvino, E. M., microchemical methods for distinguishing between glycogen and dextrin, ii, 707.

Camargo, T. de A., presence of vernine (guanosine) in the green leaves and berries of the coffee tree (*Coffea Arabica*, L.) and its relation to the origin of caffeine in this plant, i, 598.

Cambi, L., and **G. Bozza**, pyrosulphates and acid sulphates, ii, 37.

Cameron, W. H. B. See **R. C. Johnson**.

Campbell, A. N., electrolytic formation of alloys and amalgams of manganese, ii, 764.

Campbell, A. N. See also **A. J. Allmand**.

Campbell, C., and **O. C. de C. Ellis**, influence of nitrogen dilution on the speed of flame. I., ii, 746.

Campbell, C. J. See **B. J. Alpers**.

Campbell, E. D. See **A. W. Smith**.

Campbell, R., and **W. N. Haworth**, synthesis of amygdalin, i, 866.

Canals, E., invertase, i, 693.

Canneri, G., molybdovanado-arsenates and tungstovanado-arsenates (heterotri-arsenates), ii, 117.

Canneri, G. [with **C. della Pergola**, **R. Ragionieri**, and **G. Winspeare**], molybdovanadates, ii, 118.

Canneri, G., and **V. Festelli**, synthesis of carnotite, ii, 865.

Cannon, influence of temperature of the soil on the relation of roots to oxygen, i, 925.

Cannon, H. C. See **T. B. Osborne**.

Cannon, L. T. See **H. Hibbert**.

Cannon, W. A., and **E. E. Free**, anaërobic experiments with argon, i, 809.

Cantelo, R. C., thermal decomposition of methane, ii, 840.

Canter, R. C. See **L. A. Congdon**.

Cantinieux, V., excretion of creatinine by the kidneys, i, 688.

Caplan, P. See **M. Knobel**.

Cappelli, G., Dragendorff's reagent [for alkaloids], ii, 794.

Cappellini, L. See **U. Sborgi**.

Capua, di. See **Di Capua**.

Capuano, G. B. See **S. Berlingozzi**.

Card, L. E. See **T. S. Hamilton**.

Cardoso, E., A. A. Coppola. and **U. Florentino**, measurement of vapour pressure of gases liquefying at low pressures, ii, 654.

Cardot, H. See **C. Richet**.

Carleton, R. K. See **A. B. Lamb**.

Carli, F. de. See **C. Mazzetti**.

- Carlson, A. J.** See *E. B. Bulatao*.
- Carman, A. P.**, electrometer method for measuring dielectric constants of liquids, ii, 809.
- Carman, J. S.** See *H. A. Mattill*.
- Carobbi, G.**, Traversella scheelite, ii, 269.
supposed isomorphism of uranyl compounds with those of the isomorphogenic metals of the magnesium group, ii, 414.
- Carobbi, G.**, and *V. Caglioti*, diffusion of anhydrous sodium sulphate among the products of the present activity of Vesuvius, ii, 676.
non-existence of the double sulphate, $\text{MnK}_2(\text{SO}_4)_2$, ii, 685.
- Carobbi, G.** See also *F. Zambonini*.
- Carothers, W. H.**, the double bond, ii, 814.
- Carothers, W. H.**, and *R. Adams*, platinum oxide as a catalyst in the reduction of organic compounds. V. Preparation of primary alcohols by the catalytic hydrogenation of aldehydes, i, 968.
- Carozzi, E.**, isomorphism between certain cubic compounds of platinum, lead, selenium, and tin, ii, 768.
- Carpenter, M. S.** See *J. B. Ekeley*.
- Carpenter, V. A.** See *P. C. Austin*.
- Carr, R. H.** See *V. Graham*.
- Carrelli, A.**, absorption of iodine solutions, ii, 5.
dispersion of iodine solutions, ii, 6.
fluorescence of organic substances, ii, 7.
polarised light of fluorescence, ii, 220.
- Carrière, E.**, and *M. Auméras*, equilibrium in the system, calcium oxalate-dilute hydrochloric acid, i, 137.
- Carrière, E.**, and *C. Leenhardt*, analysis of volatile organic substances by combustion in an open tube, ii, 869.
- Carrière, J. F.**, behaviour of oil and of oleic acid towards water, ii, 461.
- Carroll, B. H.**, and *J. H. Mathews*, calorimeter for heats of mixing at elevated temperatures, ii, 158.
- Carroll, J. A.**, mercury seals on ground joints in horizontal or inverted positions, ii, 469.
- Carse, G. A.**, and *D. Jack*, electron emission from magnetised and unmagnetised iron, ii, 444.
- Carter, J. A.** See *L. A. Congdon*.
- Carter, P. G.** See *H. G. Smith*.
- Carter, S. R.**, and *J. A. V. Butler*, action of hydrogen chloride on methyl alcohol, i, 603.
- Carter, S. R.**, and *F. H. Clews*, oxidation potentials of ferrous and ferric salts in concentrated hydrochloric acid and phosphoric acid, ii, 744.
- Carver, E. K.** See *T. W. Richards*.
- Casares Gil, J.**, and *J. Beato*, the existence of free thiosulphuric acid in the presence of fuming hydrochloric acid and the preparation of alcoholic solutions of thiosulphuric acid, ii, 104.
- Cascão de Anciães, J. H.**, rôle of adsorption in the determination of the residual nitrogen, ii, 273, 565.
- Caseneuve**, reaction of resorcinol and its application to the detection of nitroprussides and ammonia, ii, 356.
- Cassella & Co., L.**, preparation of condensation products of the aromatic series containing nitrogen and sulphur, i, 88.
preparation of *p*-dialkylaminoaryl-phosphinous acids, i, 887.
manufacture of alkyloxyacridines, i, 991.
production of acridinium compounds, i, 1111.
- Castille, A.**, and *V. Henri*, purification of organic solvents: alcohol, ether, and hexane, ii, 581.
- Catalán, M. A.**, the system of quartets in the scandium spectrum and the periodic system, ii, 78.
the Zeeman effect of the multiplets of molybdenum, ii, 135.
determination of the relative values of the terms of a spectrum; application to the spectrum of neutral vanadium, ii, 361.
relation between pressure shift, temperature class, and spectral terms of the iron lines, ii, 435.
- Catharinus, P.** See *M. Bredt-Savelsberg*.
- Catoire, M.** See *G. Malfitano*.
- Cattini, E.** See *G. Cusmano*.
- Cauquil, (Mlle.) G.**, esterification of cyclohexanol and of some of its homologues, i, 280, 635.
- Cavanagh, B.**, measurement of activity by the partition method. I., ii, 726.
- Caven, R. M.**, and *J. Ferguson*, dissociation pressures of hydrated double sulphates. II. Various double sulphates of the type $\text{M}'\text{SO}_4 \cdot \text{M}\text{SO}_4 \cdot 6\text{H}_2\text{O}$, ii, 553.
- Caven, R. M.**, and *T. C. Mitchell*, systems, cupric sulphate-potassium sulphate-water, and cupric sulphate-ammonium sulphate-water, ii, 683.

- Cavins, A. W.**, effect of fasting (and re-feeding) on the calcium and inorganic phosphorus in blood serums of normal and rachitic rats, i, 680.
- Cayeux, L.**, felspathic sandstones of the Hercynian chain and the products of permo-triassic evaporation, ii, 867.
- Cazzani, U.** See **A. Contardi**.
- Cecchini, A.**, volatile fatty acids in faeces, i, 1137.
- Centnerszwer, M.**, some conclusions from van der Waals' equation, ii, 21.
velocity of dissolution of magnesium by acids, ii, 29.
- Centnerszwer, M.**, and **L. Andrusov**, dissociation of cadmium carbonate: method of determining dissociation pressures, ii, 655.
- Centnerszwer, M.**, and **C. Strenk**, disulphur difluoride, ii, 167.
- Cerdeiras, J. J.**, action of halogens on unsaturated aliphatic compounds, i, 1033.
- Cerecedo, L. R.**, and **C. P. Sherwin**, comparative metabolism of certain aromatic acids. V. Fate of some ring substitution products of phenylacetic acid in the organisms of the dog, rabbit, and man, i, 449.
- Cerighelli, R.**, respiratory quotient of roots and its variation with the development of the plant, i, 475.
- Chabanier, H.**, **M. Lebert**, and **C. Lobo-Onell**, determination of uric acid and purines in blood-serum and urine by the copper urate method, ii, 75.
- Chaborski, (Mlle.) G.**, detection of chromium in the presence of manganese by wet analysis, ii, 278.
- Chaborski, (Mlle.) G.** See also **G. G. Longinescu**.
- Chadwick, J.** See **E. Rutherford**.
- Chakravarti, G. C.**, condensation of benzoic acid and substituted benzoic acids with resacetophenone, i, 653.
- Chalkley, L., jun.** See **M. S. Kharasch**.
- Challenger, F.**, and **A. D. Collins**, orienting influence of the thiocyanogroup in aromatic compounds, i, 953.
- Challenger, F.**, and **F. Pritchard**, action of inorganic halides on organo-metallic compounds, i, 676.
- Challenger, F.** See also **J. F. Wilkin-son**.
- Chalupny, K.**, and **K. Breisch**, separation of cadmium from zinc by precipitation as sulphide in potassium cyanide solution, ii, 501.
- Chamberlain, K.**, fine structure of X-ray absorption edges, ii, 721.
- Chamié, (Mlle.) C.** See **(Mlle.) I. Curie**, and **V. Vernadski**.
- Chapman, D. L.**, and **L. J. Davies**, phosphorescence of fused transparent silica, ii, 220.
- Chapman, M. C. C.**, first law of photochemistry, ii, 668.
- Chapman, S.**, and **W. Hainsworth**, kinetic theory of viscosity, conduction, and diffusion, ii, 823.
- Chappell, J. T.** See **C. H. Milligan**.
- Charaux, C.**, biochemical resolution of rutin; formation of a new glucide, rutinose, i, 659.
biochemical hydrolysis of rutin; presence of rutin in plants and identification of the glucoside and its hydrolysis products, i, 1272.
- Charaux, C.** See also **M. Bridel**.
- Chardonnens, L.** See **H. de Diesbach**.
- Chariton, J.**, and **N. Semionoff**, critical temperature for the condensation of metal vapours, ii, 723.
- Charonnat, R.**, stereochemistry of ruthenium, i, 706, 707.
- Charpentier, J.**, pectins of *Apium graveolens*, of the tubers of *Stachys tuberosa*, and of the rind of *Citrus vulgaris*; biochemical method of characterising galactose applied to the study of the composition of these pectins, i, 811.
- Charpentier, J.** See also **M. Bridel**.
- Charrier, G.**, *o*-quinones derived from 2-aryl- $\alpha\beta$ -naphthatriazoles, i, 1351.
- Charrier, G.** [with **G. Bonomi** and **T. Bettinazzi**], *p*-phenylene-1:2-dinaphthaditriazole, i, 334.
- Charrier, G.** [with **A. Odifreddi, A. Manfredi**, and **E. Mars**], *vic*-2-*N*-aryltriazolephthalonic acids, i, 329.
- Charrier, G.**, and **A. Beretta** [with **L. Albani, G. Drisaldi, A. de Leonibus, A. Nani, P. Pavesi**, and **O. Tavazzani**], characterisation of aminoazo-derivatives, i, 221.
- Charrier, G.**, and **M. Gallotti** [with **R. Sala, Q. Mingoa**, and **P. Torazzi**], $\alpha\beta$ -naphthatriazoles, i, 332.
- Charriou, A.**, electrolytic purification of precipitates, ii, 345.
absorption of potassium hydroxide by humic acid, ii, 736.
- Chassevent, L.**, heat effects which accompany the setting of plaster of Paris, ii, 610.
- Chassevent, L.** See also **P. Jolibois**.
- Chassy, A.**, physical laws of the formation of ozone by the silent discharge, ii, 468.
- Chattaway, F. D.**, and **O. G. Backeberg**, chlorination of ethyl alcohol, i, 703.

- Chattaway, F. D., and H. J. Dowden**, nitrogen chlorides derived from nitro-substituted acetanilides, i, 722.
- Chattaway, F. D., and F. L. Garton**, tetrachloriodides of organic bases, i, 270.
- Chattaway, F. D., F. L. Garton, and G. D. Parkes**, diazonium tetrachloriodides and chloroplumbates, i, 1355.
- Chattaway, F. D., R. K. Hardy, and H. G. Watts**, halogen-substituted arylthiocarbimides, i, 1058.
- Chattaway, F. D., and G. D. Parkes**, action of diacetyltartaric anhydride and chlorofumaryl chloride on aromatic amines and hydrazines, i, 489.
- Chattaway, F. D., and A. J. Walker**, polymorphic nitrobenzaldehydehydrazones, i, 859.
- Chatterjee, K. P.**, tartrates, i, 940.
- Chatterjee, K. P. and N. R. Dhar**, sparingly soluble salts, readily obtained from hot solutions of reacting substances. I., ii, 837.
- Chatterji, A. C.** See *N. R. Dhar*.
- Chaudhuri, S. G.** See *J. N. Mukherjee*.
- Chaudron, G., and H. Forestier**, decomposition of ferrous oxide; irregularities in expansion due to its instability, ii, 617.
- Chaudun, (Mlle.) A.** See *H. Colin*.
- Chauffard, A., P. Brodin, P. Zizine, and A. Grigaut**, diffusion of glucose in the organism, i, 1139.
- Chauvenet, E.** See *A. Boutaric, and A. Bonzat*.
- Chaux, R.** See *C. Mouren*.
- Chavanne, G., and H. de Graef**, methyl-ethylisopropylmethane and diisopropylmethane, i, 1025.
- Chavastelon**, diffusion of sulphur vapour in air at the ordinary temperature, ii, 37.
- Chemische Fabrik auf Aktien vorm. E. Schering**, preparation of new barbituric acid compounds, i, 211.
- Chemische Fabrik auf Aktien vorm. E. Schering.** See also *M. Dohrn*.
- Chemische Fabrik Altstetten Aktien-Gesellschaft**, 4-dimethylamino-1-phenyl-2:3-dimethyl-5-pyrazolone, i, 1115.
- Chemische Fabrik Flora**, dichlorotyrosine [α -amino- β -3:5-dichloro-4-hydroxyphenylpropionic acid], i, 173.
preparation of dibromotyrosine [α -amino- β -3:5-dibromo-4-hydroxyphenylpropionic acid], i, 173.
preparation of δ -methyl- β -dimethyl(diethyl)aminopentan- α -ol, i, 838.
- Chemische Fabrik Griesheim-Elektron**, preparation of hydrogenation products of naphthalene and its derivatives, i, 31.
preparation of acylacetyl compounds, i, 671, 674.
- Chemische Fabrik von Heyden, CC-**phenylalkylmethane dialkylsulphones, i, 1205.
- Chemische Fabrik Rhenania**, nitrogenous condensation products from acetylene and ammonia, i, 1175.
- Chemische Fabrik vorm. Weiler-ter Meer**, preparation of chloroethylsulphuryl chloride, i, 134.
preparation of amidines, i, 159.
preparation of tetrahydrocarbazoles, i, 207.
derivatives of naphthylaminesulphonic acids and aminonaphtholsulphonic acids, i, 1059.
- Chemische Werke Grenzach**, halogenated anhydrides of *o*-hydrocoumaric acid [melilotic acid], i, 1312.
- Chen, K. K., and H. C. Bradley**, autolysis. X. The autolysis of muscle, i, 684.
- Chen, K. K., W. Meek, and H. C. Bradley**, autolysis. XII. Experimental atrophy of muscle tissue, i, 1379.
- Chen, T. H.** See *L. A. Congdon*.
- Chenault, R. L.** See *A. E. Ruark*.
- Chéneveau, C., and R. Bonssu**, determination of calcium by the opacimetric [nephelometric] method, ii, 61.
- Cheraskova, E.** See *A. Bach*.
- Cherbuliez, E.**, determination of the degree of dissociation of a binary electrolyte from conductivity [measurements], ii, 148.
- Cheymol, J.** See *H. Hérissay*.
- Chiarino, J. C.**, volumetric analysis of sodium hydrogen carbonate containing sodium carbonate, ii, 348.
- Chibnall, A. C.**, nitrogenous metabolism of the higher plants. V. Diurnal variations in the protein nitrogen of runner bean leaves, i, 810.
nitrogenous metabolism of the higher plants. VI. Rôle of asparagine in the metabolism of the mature plant, i, 810.
nitrogenous metabolism of the higher plants. VII. Leaf protein metabolism in normal and abnormal runner bean plants, i, 811.
spinacin, a new protein from spinach leaves, i, 1272.
- Child, W. C., and H. Adkins**, condensation of aldehydes to esters by aluminium ethoxide, i, 139.

- Chipart, H.**, electromagnetic theory of optical activity and MacCullagh's postulate, ii, 715.
- Chisholm, D.** See *G. G. Henderson*.
- Chlopin, V.**, the separation of radium and barium, ii, 42.
- Chlopin, V.** See also *L. Tschugaev*.
- Choehrjakov, (Miss) W.** See *S. Nametkin*.
- Chopin, M.**, mobility of organically combined chlorine in the Friedel-Crafts reaction; influence of the solvent, i, 861.
- Choucroun, F.**, electrification by adsorption of membranes and colloids, ii, 155.
- Choufoer, H. J.** See *A. F. Holleman*.
- Chowdhury, J. K.**, ethers of polysaccharides with hydroxy-acids, i, 1029.
- Christ, B.** See *K. Elbs*.
- Christiansen, J. A.**, negative catalysis, ii, 242.
- Christiansen, J. A., G. von Hevesy, and S. Lomholt**, circulation of lead in the organism investigated by a radiochemical method, i, 1372.
- Christiansen, J. A., and H. A. Kramers**, velocity of chemical reactions, ii, 28.
- Christiansen, W. G.**, *NN'*-dimethylene-sulphurous acid-3:3'-diamino-4:4'-dihydroxyazobenzene, i, 576.
- Christman, A. A., and H. B. Lewis**, allantoin. I. The influence of amino-acids on the excretion of allantoin by the rabbit, i, 121.
- Christmann, F.** See *S. Goldschmidt*.
- Chrzaszcz, T.**, the influence of temperature on the action of amylase; the action on the saccharifying power of amylase, i, 233.
- dextrin-producing power of malt amylase and the reactivation of amylase inactivated by heat, i, 1142.
- Chu, C. T.** See *C. B. Bazzoni*.
- Chuit, P., and J. Bolle**, preparation of *p*-isopropylphenylacetaldehyde and some of its isomerides and homologues, i, 735.
- Chydenius, C. W.** See *R. Stoermer*.
- Ciampa, A.** See *L. Belladen*.
- Cikánek, L., J. Havlík, and F. Kubánek**, protein coagulation in drops. IV. Influence of the nature of the proteins and precipitants on the precipitate, i, 678.
- Cilliers, A. C.** See *W. Gerlach*.
- Citron, L.**, behaviour of the many-lined spectrum of hydrogen at low temperatures, ii, 214.
- Cittert, M. J. van.** See *I. M. Kolt-hoff*.
- Ciurlo, A.** See *L. Francesconi*.
- Ciusa, R., and E. Parisi**, peroxides of monoximes. II., i, 52.
- Ciusa, R., and G. Bastelli**, salts with *p*-, *o*-, and *m*-quinonoid structure, i, 578.
- Ciusa, R., and G. Scagliarini**, strychnine and brucine, i, 760.
- Claassen, A.**, high-vacuum pumps, ii, 603.
- Clack, B. W.**, study of diffusion in liquids by an optical method, ii, 523.
- Claisen, L.**, preparation of chromans, i, 198.
- Clarens, J.**, oxydases, i, 1379.
- Clark, A. J.**, active principles of peptone, i, 797.
- Clark, E. D.** See *C. R. Fellers*.
- Clark, G. L.**, secondary valency in the light of recent researches. II. Alkali polyhalides, ii, 227.
- excitation, reflection, and utilisation in crystal structure; analyses of characteristic secondary X-rays, ii, 299.
- Clark, G. L., and W. Duane**, abnormal reflection of X-rays by crystals, ii, 300.
- secondary and tertiary X-rays from germanium, etc., ii, 369.
- study of secondary valency by X-rays, ii, 855.
- Clark, G. L., W. Duane, and W. W. Stifter**, secondary and tertiary rays from chemical elements of small atomic number due to primary X-rays from a molybdenum target, ii, 368.
- Clark, G. L.** See also *S. K. Allison*.
- Clark, H.** See *M. T. Bogert*.
- Clark, J. H.**, effect of ultra-violet light on the condition of calcium in the blood, i, 1253.
- Clark, L. H.**, radium balance, ii, 323.
- Clark, N. A.**, influence of certain chemicals on the rate of reproduction of yeast in wort, i, 592.
- Clark, N. A., and E. M. Boller**, "auximones," and the growth of the green plant, i, 809.
- Clark, W. J.**, method of determining radiating and ionisation potentials not necessitating low pressures, ii, 221.
- Clark, W. M.** See *B. Cohen, E. Elvove, and M. X. Sullivan*.
- Clarke, F. W.**, evolution and disintegration of matter, ii, 587.
- Clarke, H. T., and W. W. Hartman**, preparation of thioacetic acid, i, 1041.

- Clarke, H. T., and R. R. Read, modification of the Sandmeyer synthesis of nitriles, i, 731.
- Clavera, J. M. See E. Moles.
- Clayton, M. M. See H. A. Mattill.
- Clayton, W. See W. E. Gibbs.
- Clemo, G. R., and W. H. Perkin, jun., synthesis of 4-tetrahydroquinolone and a new synthesis of 4-methoxyquinoline, i, 1103.
- vinyl derivatives, especially of carbazole and tetrahydrocarbazole, and their behaviour with acids, i, 1343.
- Clemo, G. R., W. H. Perkin, jun., and R. Robinson, strychnine and brucine. II., i, 1337.
- Clemo, G. R. See also British Dyestuffs Corporation, Ltd.
- Clevenger, J. F., micro-melting-point apparatus, ii, 694.
- Clews, F. H. See S. R. Carter.
- Clifford, W. M., hydrolysis of protein by a heat-stable catalyst present in muscle, i, 904.
- Cloetta, M., and H. Thomann, theory of narcosis, i, 1377.
- Clogne, R., (Mlle.) Welti, and M. Pichon, determination of glycogen in the placenta, i, 1371.
- Clough, H. D., R. S. Allen, and E. W. Root, jun., determination of the potency of insulin preparations, ii, 636.
- Clover, A. M., autoxidation of chloroform, i, 131.
- autoxidation of ethers, i, 363.
- Cluzet, Rochaix, and Kofman, optimum and limiting concentrations of hydrogen ions for bacterial cultures; tendency of cultures to approach the optimum concentrations, i, 803.
- Coates, V., and P. C. Raiment, calcium content of the blood-serum in cases of gout, i, 1374.
- Coblentz, W. W., thermoelectrical and actinoelectrical properties of molybdenite, ii, 716.
- Coe, M. R., and G. L. Bidwell, determination of starch and sugars by the use of picric acid, ii, 429.
- Coffignier, C., colloidal phenomena in paints prepared with polymerised oils, ii, 27.
- Cohen, B., H. D. Gibbs, and W. M. Clark, oxidation-reduction. V. Electrode potentials of simple indophenols each in equilibrium with its reduction product, ii, 597.
- Cohen, B. See also M. X. Sullivan.
- Cohen, E., metastability of elements and compounds as a consequence of enantiotropy and monotropy. VII., ii, 450, 603.
- Cohen, E., and H. R. Bruins, potentiometric determination of the velocity of diffusion of metals through mercury, ii, 521.
- piezochemical studies. XXV. Influence of pressure on the velocity of diffusion of metals through mercury, ii, 521.
- Cohen, E., W. D. Helderman, and A. L. T. Moesveld, metastability of elements and compounds as a consequence of enantiotropy and monotropy. VI., ii, 450.
- Cohen, E., and J. Kooy, metastability of the elements and chemical compounds in consequence of enantiotropy or monotropy. IV., ii, 383, 449.
- Cohen, E., W. A. T. de Meester, and A. L. T. Moesveld, piezochemical studies. XXIV. Experimental determination of the fictitious volume change in solution equilibria. II., ii, 234.
- Cohen, E., and A. L. T. Moesveld, metastability of the elements and chemical compounds in consequence of enantiotropy or monotropy. V., ii, 382, 450.
- Cohen, I., and E. C. Dodds, colorimetric determination of diastase in body fluids, ii, 636.
- Cohen, J. B. See C. H. Browning.
- Cohen, S. J., blood diastases. I., i, 1266.
- Cohen, W. See F. P. Underhill.
- Cohn, D. J. See J. M. Nelson.
- Cohn, E. J., and R. E. L. Berggren, physical chemistry of the proteins. III. Relation between the amino-acid composition of casein and its capacity to combine with base, ii, 832.
- Cohn, E. J., R. E. L. Berggren, and T. L. Hendry, physical chemistry of the proteins. IV. Relation between the composition of zein and its acid and basic properties, ii, 832.
- Cohn, T., cause of the colour produced in glasses of anhydrous borax and sodium metaphosphate by fusion with metallic oxides, ii, 606.
- Colborne, R. S. See J. C. Philip.
- Colby, W. F., formulation of absorption bands in the near infra-red, ii, 366.
- Coleman, G. H., and H. P. Howells, addition of nitrogen trichloride to unsaturated hydrocarbons. I., i, 130.
- Colin, H., and (Mlle.) A. Chaudun, comparison of the action of acids and enzymes in hydrolytic phenomena, i, 466.
- glucose [dextrose] from α - and β -glucosides, i, 497.
- the glucose of sucrose, i, 1286.

- Colin, H.**, and **V. Estienne**, utilisation of levulosans by organisms, i, 1014.
- Colin, H.**, and **R. Franquet**, the migration of inulin in the grafts of composites, i, 353.
- Colin, H.**, and **H. Grandsire**, ternary materials of green and etiolated leaves, i, 1152.
- Collander, R.**, permeability of precipitated copper ferrocyanide membranes for non-electrolytes, ii, 154.
- Collazo, J. A.**, nitrogen metabolism in avitaminosis, i, 787.
- Collazo, J. A.** See also **D. Alpern**, and **A. Bickel**.
- Collenberg, O.**, decomposition of the octacyanides of quadrivalent molybdenum and tungsten by sunlight. I, i, 1054.
oxidation potentials of molybdenum and tungsten octacyanides, ii, 526.
- Collenberg, O.**, and **G. Bakke**, determination of antimony by means of permanganate in hydrochloric acid solution, ii, 207.
- Collenberg, O.**, and **A. Guthe**, reduction potential of quinquevalent tungsten chloride, ii, 619.
electrolytic preparation of lower tungsten chlorides, ii, 688.
- Collenberg, O.**, and **K. Sandved**, complex chlorotungstates, ii, 51.
- Collet, (Mlle.) P.**, paramagnetism of iron in potassium ferricyanide, ii, 378.
- Collet, (Mlle.) P.** See also **P. Weiss**.
- Collett, M. E.**, specificity of the intracellular hydrogenases in frog's muscle, i, 462.
- Collins, A. D.** See **F. Challenger**.
- Collins, A. M.** See **W. A. Jacobs**, and **J. M. Nelson**.
- Collins, E. H.**, effect of temperature on the regular reflection of X-rays from aluminium, ii, 652.
- Collins, H.**, structure of phosphorus, ii, 229.
constitution and structure of an atom of sodium, ii, 229.
structure of vanadium, ii, 229.
structure of oxygen, ii, 297.
structure of neon and argon, ii, 297.
structure of sulphur, ii, 381.
structure of selenium, ii, 516.
structure of silicon, ii, 588.
structure of calcium, ii, 588.
structure of cobalt, ii, 650.
structure of silver, ii, 812.
structure of antimony, ii, 812.
- Collins, W. M.** See **W. A. Jacobs**.
- Collip, J. B.**, glucokinase. III. An apparent synthesis in the normal animal of a hypoglycæmia-producing principle; animal passage of the principle; i, 447.
- Coltman, R. W.**, determination of manganese. II. Manganous oxalate as a primary standard, ii, 570.
- Coltman, R. W.** See also **T. R. Cunningham**.
- Comanducci, E.**, action of "aspirin" on urethane, i, 44.
- Comber, N. M.**, and **S. J. Saint**, absorption of bases by soils, i, 1395.
- Compton, A.**, blood enzymes. IV. Maltase of dog's serum; influence on activity of the reaction of the medium and of the state of digestion, i, 594.
- Compton, K. T.**, chemical and spectroscopic properties of excited atoms and reversible effects of electron impacts in gases, ii, 8.
- Compton, K. T.**, and **C. H. Eckart**, explanation of abnormal low-voltage arcs, ii, 515.
- Compton, K. T.**, and **H. N. Russell**, possible explanation of the behaviour of the hydrogen lines in giant stars, ii, 509.
- Compton, K. T.**, and **L. A. Turner**, band spectrum of mercury and the dissociation of hydrogen molecules by excited mercury atoms, ii, 639.
- Compton, K. T.** See also **O. S. Duffendack**, and **P. S. Olmstead**.
- Conant, J. B.**, an electrochemical study of hæmoglobin, i, 103.
- Conant, J. B.**, and **H. B. Cutter**, irreversible reduction and catalytic hydrogenation, ii, 844.
- Conant, J. B.**, and **L. F. Fieser**, reduction potentials of quinones. II. Potentials of certain derivatives of benzoquinone, naphthaquinone, and anthraquinone, ii, 839.
- Conant, J. B.**, and **E. L. Jackson**, mechanism of the decomposition of β -bromophosphinic acids in alkaline solution, i, 775.
addition of methyl hypobromite to certain ethylene derivatives, i, 962.
- Conant, J. B.**, and **W. R. Kerner**, the relation between the structure of organic halides and the speed of their reaction with inorganic iodides. I. The problem of alternating polarity in chain compounds, i, 273.
- Conant, J. B.**, and **R. E. Lutz**, irreversible reduction of organic compounds. I. The relation between apparent reduction potential and hydrogen-ion concentration, ii, 463.

- Conant, J. B., and O. R. Quayle**, the purity of α -dichlorohydrin prepared by the action of hydrogen chloride on glycerol, i, 7.
- Conant, J. B., J. B. Segur, and W. R. Kirner**, phenyl γ -chloropropyl ketone, i, 1205.
- Conant, J. B., and A. W. Sloan**, the formation of free radicals by reduction with vanadous chloride, i, 304.
- Conant, J. B., and V. H. Wallingford**, additive reactions of the phosphorus halides. VIII. Kinetic evidence in regard to the mechanism of the reaction, i, 339.
- Congdon, L. A., and C. H. Belge**, critical studies on methods of analysis. I. Nickel, ii, 205.
- Congdon, L. A., and W. W. Bray**, critical studies on methods of analysis. XI. Selenium, ii, 422.
- Congdon, L. A., F. J. Brown, and R. K. Friedel**, critical studies on methods of analysis. XIII. Carbon, ii, 872.
- Congdon, L. A., and R. C. Canter**, critical studies on methods of analysis. V. Cadmium, ii, 277.
- Congdon, L. A., and J. A. Carter**, critical studies on methods of analysis. IV. Aluminium, ii, 277.
- Congdon, L. A., and T. H. Chen**, critical studies on methods of analysis. VII. Cobalt, ii, 278.
- Congdon, L. A., W. P. Eddy, jun., and E. S. Milligan**, critical studies on methods of analysis. IX. Calcium, ii, 349.
- Congdon, L. A., and D. Fitzgerald**, critical studies on methods of analysis. VIII. Barium, ii, 425.
- Congdon, L. A., and R. K. Gurley**, critical studies on methods of analysis. II. Chromium, ii, 205.
- Congdon, L. A., and J. L. Neal, jun.**, critical studies on methods of analysis. III. Manganese, ii, 205.
- Congdon, L. A., and E. L. Ray**, critical studies on methods of analysis. X. Cerium, ii, 349.
- Congdon, L. A., and L. V. Rohner**, critical studies on methods of analysis. VI. Molybdenum, ii, 277.
- Congdon, L. A., and J. M. Rosso**, critical studies on methods of analysis. XII. Boron, ii, 781.
- Conley, J. E.** See **R. B. Moore**.
- Conn, H. J.** See **J. S. Joffe**.
- Connell, S. J. B., and S. S. Zilva**, reducing properties of antiscorbutic preparations, i, 901.
- differential analysis of the antiscorbutic factor. II., i, 901.
- Conner, S. D.**, factors affecting the growth of crops on acid soils, i, 600.
- Considine, F. J.**, automatic burette with improved guard system, ii, 269.
- simple, useful forms of hydrogen electrode, ii, 562.
- Consortium für Elektrochemische Industrie**, preparation of anhydrides of fatty acids of low molecular weight, i, 8.
- Constable, F. H.** See **W. G. Palmer**.
- Constam, G.**, the influence of oral administration of dextrose on the blood-sugar and on glycosuria in healthy individuals, i, 246.
- Contardi, A., and U. Cazzani**, arseno-benzene derivatives, i, 1246.
- Cook, J. W.** See **E. de B. Barnett**.
- Cook, S. R.**, possible isotopes of the elements, ii, 812.
- Cooley, J. P.**, infra-red band spectrum of methane, ii, 802.
- Coolhaas, C.** See **N. L. Sohngen**.
- Coolidge, A. S.**, bifilar quartz-tube manometer, ii, 323.
- Cooper, E. A., and G. E. Forstner**, selective bactericidal action, i, 1386.
- Cooper, E. A.** See also **G. T. Morgan**.
- Cooper, W. C., jun.** See **G. P. Baxter**.
- Copaux, H., and J. Daric**, comparative susceptibility of natural phosphates towards acids and its potentiometric determination, ii, 872.
- Copaux, H.** See also **G. André**.
- Coppens, P. A.**, determination of sugar in blood by Bang's method, ii, 707.
- Coppola, A. A.** See **E. Cardoso**.
- Coquoin, R.**, adsorption of sodium salicylate by blood-serum, i, 1123.
- Corbet, A. S.** See **H. Bassett**.
- Cordone, B.**, colour of the simplequinone-imines, and their salts. II. Some new quinoneimines and their stability, i, 1325.
- Cordone, B.** See also **F. Kehrmann**.
- Core, A. F.**, theory of solutions, ii, 452.
- Corey, R. B.** See **L. M. Dennis**.
- Cori, C. F., G. T. Cori, and H. L. Goltz**, comparative study of the blood-sugar concentration in the liver vein, the leg artery, and the leg vein during insulin action, i, 446.
- Cori, G. T.** See **C. F. Cori**.
- Cornillot, A.**, constitution of phthalonic acid, i, 288, 515.
- constitution of phthalonic acid; its compounds with aniline, i, 1071.
- Cornillot, A.** See also **E. E. Blaise**.
- Cornog, J., and W. E. Henderson**, thermal decomposition of sodium, barium, and cadmium dithionates in aqueous solution, ii, 857.

- Cornubert, R.** See *A. Haller*.
- Correns, C. W.**, adsorption experiments with very dilute copper and lead solutions and their significance in the study of mineral deposits, ii, 735.
- Corty, E.** See *R. Anschütz*.
- Cosma, J.** See *I. Nitzescu*.
- Costa, D.**, absorptive power of starch for gases and its action on magnesium alkyl derivatives, i, 714.
- Coste, J. H., and E. R. Andrews**, solubility of atmospheric gases in solutions of ammonium chloride, ii, 347.
- Costeanu, N. D.**, emetics [caesium antimonyl tartrate], i, 611.
- Coster, D.**, quantitative and qualitative analysis with the aid of Röntgen rays, ii, 199.
- X-ray absorption spectra*, ii, 581.
- Cotton, A.** [formation of photo-electrically active films of cuprous oxide], ii, 602.
- Coucoulesco, I.**, reaction of zinc on mixtures on ethyl α -bromoisobutyrate and aldehydes or ketones, i, 261.
- crystalline compounds of zinc bromide and iodide with acetone, ii, 411.
- Coudere, A.** See *G. Vavon*.
- Coulter, C. B.**, membrane equilibria and the electric charge of red blood-cells, ii, 835.
- Coupin, H.**, production of ozone by green plants, i, 808.
- Courtois, G.**, preparation and properties of some organic uranyl salts and, in particular, of uranyl benzoates and salicylates, i, 285.
- stability of solutions of some organic uranyl salts in absence or in presence of light, i, 285.
- Courtot, C., and A. Dondelinger**, synthesis of indanylamine and of its *N*-substituted derivatives, i, 279.
- Courtot, C., and R. Geoffroy**, sulphonation of fluorene, i, 956.
- Courvoisier, C.** See *H. Rupe*.
- Contare, J. R.** See *L. C. Raiford*.
- Countts, J. R. H.** See *E. M. Crowther*.
- Couture, E.** See *L. Hugonnet*.
- Coward, H. F.**, sedimentation of bentonite, ii, 665.
- Coward, K. H.**, extraction and determination of lipochromes from animal and plant tissues, i, 1389.
- lipochromes of etiolated wheat seedlings, i, 1389.
- Cox, G. J.** See *W. C. Rose*.
- Crabtree, H. G.** See *R. Robinson*.
- Cramer, P. L.** See *W. L. Lewis*.
- Craven, E. C.** See *W. R. Ormandy*.
- Creighton, H. J. M.**, relation between the fluidity and the temperature of liquids, ii, 233.
- Crespi, E.**, analysis of sodium sulphide, ii, 701.
- Cretcher, L. H., and W. H. Pittenger**, alkyl ethers of ethylene glycol, i, 826.
- Creveld, S. van**, some experiments and remarks on the possible transformation of *D*-glucose in the intestine and on the nature of the blood-sugar, i, 344.
- Creveld, S. van, and E. van Dam**, effect of alcoholic pancreas extract (insulin) on the behaviour of the kidneys towards dextrose, i, 446.
- Crippa, G. B.** See *B. Oddo*.
- Crismer, L.**, fractional distillation of small quantities, ii, 591.
- Crist, R. H.** See *J. L. R. Morgan*.
- Crittenden, E. D.**, action of ammonium hydroxide on copper ferrocyanide, i, 1175.
- Croft, C. B.**, *K* and *L* absorption and emission spectra of tungsten, ii, 581.
- Cropps, W. H.**, action of light on cinnabar, ii, 614.
- Cross, C. F., and A. Engelstad**, action of aqueous sulphurous acid on lignocellulose, i, 1048.
- Crossley, M. L., and P. V. Resenvelt**, colour and constitution. I. Effect of isomerism on the colour of certain azo-dyes, i, 577.
- Crowther, E. M., and J. R. H. Countts**, discontinuity in dehydration of salt hydrates, ii, 762.
- Crowther, E. M., and W. S. Martin**, volumetric determination of total carbonic acid in dilute solutions of calcium hydrogen carbonate or in hard tap-waters, ii, 782.
- Crowther, E. M., and A. N. Puri**, indirect measurement of the aqueous vapour pressure of capillary systems by the freezing-point depression of benzene, ii, 725.
- Croze, F.**, relation of ultimate rays and resonance rays in spectra comprising several systems of series, ii, 1.
- resonance and ultimate lines in the flash spectra obtained at different levels in the solar atmosphere, ii, 134.
- Crozier, W. J.**, hydrogen-ion concentrations within the alimentary tract of insects, i, 458.
- Cruickshank, E. W. H.**, experimental tetany. III. Alkalosis and acidosis. IV. Hydrogen-ion concentration of the blood. V. Alveolar carbon dioxide tension, i, 583.

- Crut, G.**, equilibrium of the reduction of nickel and cobalt chlorides and bromides by hydrogen. I and II, ii, 491, 617.
- Cruto, A.**, determination of dextrose in blood, ii, 707.
chemical constitution of insulin, i, 1271.
- Cruto, A.** See also *C. Serono*.
- Cruz, A. O.** See *G. A. Perkins*.
- Csáki, L.**, the distribution of chlorine in the blood, i, 113.
- Csonka, F. A.**, animal calorimetry. XXVII. Administration of various proteins with benzoic acid to a pig, i, 1254.
- Csonka, F. A.** See also *D. Rapport*.
- Cullen, G. E.**, and *L. Jonas*, effect of treatment with insulin on the hydrogen-ion concentration and alkali reserve of the blood in diabetic acidosis, i, 123.
- Cullen, G. E.** See also *J. H. Austin*.
- Cullinane, N.** See *H. Ryan*.
- Cumming, W. M.**, hydroferrocyanides and hydroferriocyanides of the organic bases. III., i, 778.
determination of ferrocyanides, ii, 353.
- Cumming, W. M.**, and *G. S. Ferrier*, reduction of nitronaphthalenes. II. β -Nitronaphthalene, i, 774.
- Cummins, A. B.**, and *W. P. Kelley*, formation of sodium carbonate in soils, i, 926.
- Cuneo, G.**, nature of the reaction between carbophosphide and blood-serum, i, 229.
- Cuneo, G.** [with *E. Maragliano*], carbophosphide and its action on blood-serum, i, 100.
- Cunningham, T. R.**, and *R. W. Colman*, the determination of manganese. I. The bismuthate method, ii, 204.
- Cunningham, T. R.** See also *A. Holladay*.
- Cuny, L.**, determination of copper with permanganate, ii, 785.
- Curie, (Mlle.) I.**, and (Mlle.) *C. Chamié*, radioactive constant of radium emanation, ii, 447.
- Curie, Maurice**, spark spectra of metalloids in the liquid state, ii, 2.
action of red and infra-red radiations on photoluminescent substances, ii, 140.
photoluminescence of solid solutions, ii, 442.
phosphorescence and photoelectric effect, ii, 514, 584.
lead as the last member of the radioactive elements? ii, 649.
- Currey, G. S.**, colouring matter of the blue pansy ["Emperor William"], i, 1093.
- Currie, A. N.**, separation of a fat pigment from accompanying fat, i, 589.
lipochrome of adipose tissue in malignant disease, i, 589.
- Currie, J. E.** See *E. F. Burton*.
- Curry, B.**, relative intensities of helium lines as a function of current, ii, 800.
- Curti, D.** See *B. Oddo*.
- Curtis, O. F.**, effect of ringing a stem on the upward transfer of nitrogen and ash constituents, i, 1020.
- Curtis, W. E.**, phosphorescence of fused transparent silica, ii, 289.
- Curtius, T.**, and *P. A. Bleicher*, *m*-nitrocinnamic acid hydrazide and its behaviour with nitrous acid, i, 577.
- Curtius, T.**, and *G. Ehrhart*, the interaction of benzenesulphonazide and ethyl malonate, i, 998.
- Curtius, T.**, and *R. Gund*, conversion of *n*-butane- $\alpha\beta$ -tricarboxylic acid into its triazide and into aminomethyl ethyl ketone, i, 718.
- Curtius, T.**, and *E. Kennigott*, *m*-nitrocinnamic acid azide, i, 578.
- Curtman, L. J.**, and *D. Hart*, transposition of insoluble substances by means of a sodium carbonate solution. I. Oxalates, ii, 354.
- Curzio, A.** See *A. Piutti*.
- Cusmano, G.**, and *E. Cattini*, catalytic oxidation in presence of platinum black; oxidation of buchu-camphor. II., i, 970.
- Cutter, H. B.** See *J. B. Conant*.
- Cutter, J. O.** See *T. M. Lowry*.
- Cuttica, V.**, complex sulphates of quadrivalent cerium and the position of this element in the periodic classification, ii, 112.
double sulphites of cerium, lanthanum, and didymium with the alkali elements, ii, 113.
- Cuttica, V.**, and *A. Tocchi*, isomorphism of compounds of thorium with those of quadrivalent cerium, ii, 866.
- Cuttica, V.** See also *L. Rolla*.
- Cuy, E. J.**, oxidation of hydrazine. IV., ii, 673.
- Cuy, E. J.**, and *W. C. Bray*, oxidation of hydrazine. II., ii, 672.
- Cay, E. J.**, *M. E. Rosenberg*, and *W. C. Bray*, oxidation of hydrazine. III., ii, 673.
- Cuy, E. J.** See also *W. C. Bray*, and *H. Freundlich*.
- Czerny, O.**, oil of turpentine extracted from the firs of Bucovina, i, 659.

D.

- Dachlauer, K.**, and **C. Thomsen**, determination of halogen by combustion over platinised asbestos in a current of oxygen, ii, 419.
- Dachlauer, K.** See also **E. Diepolder**.
- Dadlez, J.**, and **W. Jankowska**, detection and determination of oxalic acid [in urine], ii, 573.
- Dähnert, W.** See **H. P. Kaufmann**.
- Dafert, O.** See **L. Kofler**.
- Dahl, P.** See **H. Goldschmidt**, and **R. Scholl**.
- Daiichi Seiyaku Kabushiki Kaisha.** See **I. Hoshino**.
- Dakin, H. D.**, resolution of inactive malic acid into optically active forms, i, 610.
formation of l-malic acid in alcoholic fermentation by yeast, i, 1142.
presence of valine in zein, i, 1152.
- Dale, J. K.**, three isomeric crystalline tetra-acetylmethyl-d-mannosides, i, 615.
- Dallas, A. E. M. M.** See **C. C. Barkla**.
- Dalmer, O.** See **A. Windaus**.
- Dalton, R. H.**, **R. Pomeroy**, and **L. E. Weymouth**, solubility of silver bromate in solutions of other salts and the corresponding activity relations, ii, 256.
- Dam, E. van.** See **S. van Creveld**.
- D'Ambrosio, A.** See **M. Garino**.
- Damerell, V. R.** See **W. L. Semon**.
- Damiens, A.**, power of spontaneous transformation of yellow mercuric iodide, ii, 184.
density of liquid and solid bodies, ii, 452.
reagent for carbon monoxide, ii, 567.
absorption of carbon monoxide by cuprous sulphate in presence of sulphuric acid; application to the production of hydrogen from water-gas, ii, 606.
- Dammel, W.** See **E. Heuser**.
- Damoy, G.** See **A. Gascard**.
- Danăila, N.**, constitution of naphthol-isatin and its derivatives, i, 550.
- Dancaster, E. A.**, chloro-perbromide equilibria, ii, 847.
viscosity and surface tension of solutions of iodine and potassium iodide, ii, 847.
- Danckwortt, P. W.**, and **P. Luy**, alkaloids of yohimbe bark, i, 981.
- Daniel, L.**, coexistence of starch and inulin in certain Compositæ, i, 477.
- Daniels, F.** See **J. W. Williams**.
- Dannhofer, O.** See **E. Rosenhauer**.
- Dardel, J. H.** See **J. Piccard**.
- Daric, J.**, rapid determination of phosphoric acid by Copaux's method, ii, 424.
- Daric, J.** See also **H. Copaux**.
- Darling, C. R.**, and **R. H. Rinaldi**, thermo-electric properties of bismuth alloys with special reference to the effect of fusion; note on thermo-electric inversion, ii, 523.
- Darling, J. F.** See **W. C. Holmes**.
- Darmois, E.**, melting points of mixtures of camphene and pinene, i, 658.
compounds of malic acid and copper, i, 1040.
- Darmois, E.**, and **A. Honnelaitre**, electrometric study of the acidity of mixtures of molybdic and malic acids, ii, 618.
- Darmois, E.**, and **J. Perin**, resolution of γ -malic acid and the preparation of α -malic acid, i, 610.
- Das, C. R.** See **R. Robinson**.
- Das, P.**, spectra of isotopes, ii, 710.
secondary spectrum of hydrogen, ii, 711.
- Dasannacharya, B.**, alcoholysis. V. Alcoholysis of esters of $\alpha\beta$ -unsaturated acids and of the corresponding saturated esters, i, 937.
- Dassigny, P.** See **M. Battegay**.
- Dassler, A.** See **A. Thiel**.
- Dastur, R. H.**, water content, a factor in photosynthesis, i, 1392.
- Datta, R. L.**, **L. Misra**, and **J. C. Bardhan**, the temperature of explosion for endothermic substances. II. Trinitro-*m*-cresolates and their explosion temperatures, i, 36.
- Dauvillier, A.**, the high-frequency lines of cerium, ii, 4.
distribution of electrons between the *L* levels of elements, ii, 138.
preliminary measurements of intensity in the high-frequency spectra of the elements, ii, 438.
spectrographic studies on the Compton effect, ii, 645.
- Dauvillier, A.** See also **L. de Broglie**.
- Davey, W. P.**, periodic law of atomic radii, ii, 297.
crystal structure of calcium oxide, sulphide, and selenide, ii, 858.
crystal structure and density of cuprous selenide and zinc selenide, ii, 860.
crystal structure of alumina, ferric oxide, and chromic oxide, ii, 861.
- Davidsohn, H.** See **L. Michaelis**.
- Davidson, J.**, is gaseous nitrogen a product of seedling metabolism? i, 127.

- Davidson, J.**, and **E. T. Wherry**, changes in hydrogen-ion concentration produced by growing seedlings in acid solutions, i, 699.
- Davies, A. C.** See **F. Horton**.
- Davies, C. W.**, and **L. J. Hudleston**, transference numbers and ionic complexity of hydrofluoric acid solutions, ii, 167.
- Davies, G. P.** See **J. A. V. Butler**.
- Davies, L. J.** See **D. L. Chapman**.
- Davis, B.**, and **R. von Nordoff**, refraction of X-rays in pyrites, ii, 299.
- Davis, C. E.**, **H. M. Salisbury**, and **M. T. Harvey**, surface tension of gelatin solutions, ii, 235.
- Davis, C. W.** See **R. B. Moore**.
- Davis, G. E.**, coefficients of diffusion of certain alkali salt vapours in the Bunsen flame, ii, 822.
- Davis, J. D.**, calorimetric apparatus for the measurement of heats of reaction at high temperatures, ii, 541.
- Davis, L. H.** See **C. C. Wang**.
- Davis, T. L.**, and **C. F. H. Allen**, reactions of tetryl [2:4:6-trinitrophenyl-methylnitroamine], i, 722.
- Davis, T. L.**, and **A. A. Ashdown**, colour tests for nitro-derivatives of diphenylamine, i, 723.
- Davison, F. R.** See **J. J. Willaman**.
- Davisson, C.**, and **C. H. Kunzman**, scattering of electrons by platinum and by magnesium, ii, 809.
- Dawkins, A. E.**, and **P. R. Weldon**, solubility of lead sulphate in dilute sulphuric acid solutions and its bearing on the quantitative separation of lead as sulphate, ii, 569.
- Dawkins, D. R.** See **E. P. Perman**.
- Dawson, L. E.**, automatic pressure regulator, ii, 246.
- De, S. C.** See **P. C. Guha**.
- Dean, P. M.**, and **O. O. Watts**, determination of sulphur by means of a thermometric titration, ii, 421.
- Dean, R. S.**, and **W. E. Hudson**, grain growth in antimonial lead, ii, 682.
- Deas, J.**, yeast growth promoting vitamin tested on animals, i, 1150.
- Debrunner, P.** See **P. Schläpfer**.
- Debucquet, L.**, atropine phosphates, i, 311.
compound of antipyrine with trichloroacetic acid, i, 1115.
determination of sulphur dioxide in sodium hydrogen sulphite solution, ii, 272.
- Debye, P.**, osmotic equation of state and activity of dilute strong electrolytes, ii, 386.
- Decarrière, E.**, catalytic oxidation of ammonia by air in contact with pure palladium, ii, 169.
- Decio, A.**, preparation of potassium guaiacolsulphonate ("thiocol"), i, 1307.
- Decker, H.**, number of atomic rings in molecules, i, 1.
- Dehn, W. M.** See **F. A. Lee**.
- Deiss, E.**, some constants of ethyl chloride, i, 131.
- Déjardin, G.**, excitation of the spectra of argon, of krypton, and of xenon, ii, 284.
excitation of the spectra of monatomic gases, ii, 709.
- Déjardin, G.** See also **L. Bloch**.
- Dekker, J.**, mangostin, the yellow colouring matter of the rind of the fruit of *Garcinia mangostana*, i, 1332.
- Delacroix, (Mlle.) A.** See **L. Lematte**.
- Delage, J. C.**, characters and composition of mustard oil, i, 1151.
- Delas, S.** See **Aversenq**.
- Delauney, P.** See **M. Bridel**.
- Delaval, H.** See **E. Kayser**.
- Delektovsky, N.** See **S. Nametkin**.
- Delépine, M.**, new form of fenchone-oxime; characterisation of fenchone in presence of camphor, i, 865.
autoxidation of organic sulphur compounds, i, 1030.
origin of fenchol in Boucharlat and Lafont's reaction, i, 1084.
transformations of pinene by acids, i, 1088.
- Delépine, M.**, and **R. Demars**, action of secondary amines on alkyl chlorosulphonates, i, 622.
- Delépine, M.**, and **J. Giron**, the chlorosulphides of carbon; decomposition in presence of iron, i, 262.
- Delépine, M.** See also **A. Duchesne**.
- Delf, E. M.**, properties of certain South African oils with respect to their content of vitamin-A, i, 587.
antiscorbutic value of fresh and canned English tomatoes, i, 902.
- Demars, R.** See **M. Delépine**.
- Demassieux, (Mme.) H.**, the equilibrium between lead chloride and iodide and some alkali chlorides and iodides in aqueous solution, ii, 182.
- Demény, L.** See **A. Kiss**.
- Demianowski, S.**, nitrogenous extractives from the spleen, i, 457.
- Deming, H. G.**, and **B. C. Hendricks**, diffusion of hydrogen through metals, ii, 94.
- Demolon, A.**, and **V. Dupont**, resistance of soils to acidification, i, 1395.

- Demonbreun, W. A.**, and **R. E. Kremers**, 2-nitro- and 2-amino-cymene, i, 158.
2-hydrazinocymene and other compounds derived from 2-aminocymene, i, 1002.
- Démora, (Mlle.) F.** See **J. Pionchon**.
- Demoussy, E.**, displacement of acids by diffusion, ii, 147.
- Demuth, F.**, precipitation of the casein of human milk, i, 1134.
- Denham, H. J.**, the construction of simple micro-balances, ii, 103.
- Denigès, G.**, antagonistic action of the trichloroacetate ion on the reducing properties of sugars, ii, 631.
use of ammoniacal silver solutions in qualitative micro-analysis, ii, 783.
- Denis, W.**, and **H. V. Hume**, nature of blood-sugar, i, 1252.
- Denis, W.** See also **H. V. Hume**.
- Dennis, L. M.**, **R. B. Corey**, and **R. W. Moore**, germanium. VII. Hydrides of germanium, ii, 343.
- Derrick, C. G.** See **J. W. Howard**.
- Dervin.** See **L. J. Olmer**.
- Desalbres, L.** See **G. Dupont**.
- Descamps, R.**, effect of temperature and of medium in the dehydration of α -phenylethyl alcohol, i, 850.
new preparation of α -phenylamino- α -phenylethane, -propane, -butane; resolution of α -phenylamino- α -phenylethane into its optical antipodes and study of the rotatory dispersion of one of these, i, 955.
- Descamps, P.**, **R. Goiffon**, and **Brousse**, determination of urobilin in urine and faecal materials, ii, 795.
- Deseö, D. von**, chemistry of osteohæmochromatosis in animals, i, 1259.
colorimetric determination of iron, ii, 503.
- Deslandres**, extension to line spectra of a property already recognised for band spectra, ii, 577.
- Desmaroux, J.**, manufacture of ether, i, 484.
- Desparmet, E.** See **L. Meunier**.
- D'Espine, J.** See **D. Yovanovitch**.
- Desvergnes, L.**, solubility of 2:4:6-trinitrotoluene, "tetryl," and tetra-nitroaniline in organic solvents, i, 843.
colour reaction of nitric acid and nitrous acid, ii, 565.
- Deuel, H. J., jun.**, metabolism of some pyrimidines, i, 1254.
- Deuerlein, E.** See **E. Diepolder**.
- Denlofeu, V.** See **A. Sordelli**.
- Dewey, C. S.** See **E. P. Kohler**.
- Dey, B. B.**, and **K. K. Row**, action of sodium sulphite on coumarins, i, 538.
- Dezani, S.**, transformation of hydrocyanic acid by plant sap, i, 1154.
- Dhar, N. R.**, induced oxidation and the explanation of the internal use of iron salts and of fever, i, 1376.
starch-iodine reaction, ii, 242.
negative and positive catalysis and the activation of molecules, ii, 746.
- Dhar, N. R.**, and **A. C. Chatterji**, formation of periodic precipitates. II., ii, 158.
- Dhar, N. R.**, **K. C. Sen**, and **S. Ghosh**, adsorption. VI. New interpretation of the Schulze-Hardy law and the importance of adsorption in the charge reversal of colloids, ii, 737.
- Dhar, N. R.** See also **R. C. Banerji**, **K. P. Chatterjee**, **S. Ghosh**, **C. C. Palit**, and **K. C. Sen**.
- Dhéré, C.**, **A. Schneider**, and **T. van der Bom**, photographic determination of fluorescence spectra of hæmatoporphyrin in various solvents, ii, 643.
- D'Hooghe, A.**, mechanism of the reduction of zinc oxide [by carbon], ii, 611.
- D'Huart, G.** See **L. Hackspill**.
- Díaz Villamil, C.**, gravimetric determination of calcium as anhydrous calcium oxalate, ii, 783.
- Díaz Villamil, C.** See also **E. Moles**.
- Di Capua, C.**, hardness of lead-thallium and cadmium-thallium alloys, ii, 111.
hardness of tin-cadmium and tin-bismuth alloys, ii, 414.
- Di Capua, C.**, and **M. Arnone**, hardness of lead-bismuth and cadmium-bismuth alloys, ii, 268.
hardness of lead-cadmium and lead-tin alloys, ii, 553.
- Dick, W.** See **C. Bülow**.
- Dickens, F.**, **L. Horton**, and **J. F. Thorpe**, ring-chain tautomerism. X. Inhibited tautomerism, i, 1313.
- Dickinson, R. G.**, combination of hydrogen and oxygen in the presence of activated mercury, ii, 841.
- Dickinson, R. G.** See also **L. Pauling**.
- Diedrich, A.** See **J. Meisenheimer**.
- Diehl, H. C.** See **J. R. Magness**.
- Diekmann, H.** See **G. Tammann**.
- Diels, O.** [with **R. W. Poindexter**, **K. Ilberg**, and **W. Gädke**], reaction products from aldehydes and 1:2-diketones, i, 296.
- Diels, O.**, **R. Beckmann**, and **G. Tönnies**, carbon suboxide, i, 1038.
- Diels, O.**, and **H. Behncke**, derivatives of cyclotriazobutane [cyclotriazomethene], i, 673.
- Diels, O.**, and **C. Wulff**, addition of mono- and poly-hydric alcohols and mercaptans to azodicarboxylic ester, i, 841.

- Diénert, F.**, and **F. Wandenbultcke**, colloidal silica, ii, 253.
- Dienes, L.**, gravimetric microchemical technique, ii, 694.
- Dienes, L.**, determination of calcium, magnesium, and phosphorus in animal substances, ii, 701.
- Diepolder, E.** [with **K. Dachlauer, E. Deuerlein**, and **E. Wolfel**], derivatives of 2-aminopyridine, 2-aminoquinoline, and 4-aminoquinoline, i, 994.
- Diesbach, H. de**, and **P. Bulliard**, attempts to synthesise benzophenone-2:3':4'-tricarboxylic acid, i, 1074.
- Diesbach, H. de**, and **L. Chardonnens**, attempt to synthesise dinaphthanthracenediquinone [dinaphthanthradiquinone], i, 1081.
- dibenzoxylxylenes and dinaphthanthradiquinones. II., i, 1082.
- Diesbach, H. de**, and **V. Schmidt**, some derivatives of dinaphthanthradiquinone and the synthesis of dinaphthalinoanthradiquinone, i, 1082.
- Dieterle, H.**, micro-determination of carbon and nitrogen in organic compounds by the wet method, ii, 567.
- Dieterle, H.** See also **J. Gadamer**.
- Dieterle, W.**, electro-analytical determination of thallium by means of the anodic deposition of thallic oxide, ii, 61.
- Dietrich, K.** See **R. Kremann**.
- Dietrich, K. R.** See **T. Sabalitschka**.
- Dietrich, W.** See **F. Fichter**.
- Dijk, J. C. van.** See **I. M. Kolthoff**.
- Dik, H. W. J.**, and **P. Zeeman**, a relation between the spectra of ionised potassium and argon, ii, 3.
- Dilthey, W., C. Ammon**, and **A. Ebert**, arylated pyridines. IV. *N*-alkylquinopyridanes, i, 553.
- Dilthey, W.**, and **J. Fischer**, pyrylium compounds. XIII. Reactivity of methyl groups in the α - and γ -positions in pyrylium salts, i, 1332.
- Dilthey, W.**, and **G. Lipps**, 3-methoxynaphthalene-2-ketocarboxylic acid, i, 175.
- Dilthey, W.**, and **O. Rauchhaupt**, additive compounds of metallic salts and doubly unsaturated aromatic ketones, i, 406.
- Dima, G. A.**, photoelectric effect in metallic compounds, ii, 11.
- Dimick, A.** See **F. P. Underhill**.
- Dinslage, E.**, and **F. Bartschat**, poisoning from barium sulphate in an X-ray examination, i, 796.
- D'Ippolito, G.**, effect of manganese on vegetation, i, 1156.
- Dirac, P. A. M.**, dissociation under a temperature gradient, ii, 537.
- Di Renzo, F.**, auxoureeses, i, 476.
- Di Renzo, F.** See also **L. Pincussex**.
- Dische, Z.** See **O. Fürth**.
- Dischendorfer, O.**, phytochemistry. I. Betulin, i, 65.
- Dittler, E.**, and **J. E. Hibsche**, anauxite and cimolite from Bilin, ii, 415.
- aragonite as a deposit from the Bilin spring, ii, 416.
- Dittmar, M.**, phlobaphens, i, 700.
- Dittrich, S.** See **K. Brunner**.
- Dixon, A. E.** See **J. Taylor**.
- Dixon, H. B.**, and **G. Greenwood**, the velocity of sound in gases and vapours, and the ratio of the specific heats, ii, 144.
- Dixon, H. H.**, and **N. G. Ball**, extraction of sap from living tissues by means of compressed air, i, 595.
- Dixon, M.**, and **S. Thurlow**, xanthine oxydase. I. Preparation and properties of the active material, i, 1380.
- xanthine oxydase. II. Dynamics of the oxydase system, i, 1380.
- xanthine oxydase. III. Reduction of nitrates, i, 1381.
- Djoritch, (Miss) Y.** See **G. Bertrand**.
- Djulgerowa, M.** See **J. Lindner**.
- Dobrowolska, (Mlle.) H.** See **L. Wertenstein**.
- Dobson, H. J. E.**, apparatus for collecting a gas at a constant pressure, ii, 748.
- Dobson, H. J. E.**, and **I. Masson**, activity of water in hydrochloric acid, ii, 306.
- Dodds, E. C.** See **I. Cohen**.
- Dodge, R. L.** See **A. T. Larson**.
- Dodonow, J.**, conversion of calcium cyanamide into cyanides, i, 1175.
- Doenhardt, W.** See **Wilhelm Schneider**.
- Doerner, H. A.** See **D. C. Bardwell**.
- Dohrn, M., C. Zöllner**, and **Chemische Fabrik auf Aktien vorm. E. Schering**, aryl substituted aminoquinolines and their derivatives, i, 1110.
- Doht, R.**, nascent hydrogen sulphide as a reagent for the determination of platinum and copper, ii, 569.
- Dörr, E.** See **B. Rassow**.
- Doisy, E. A., J. O. Ralls, E. Allen**, and **C. G. Johnston**, extraction and properties of an ovarian hormone, i, 1387.
- Doisy, E. A.** See also **A. P. Briggs**, and **M. Somogyi**.
- Dokan, S.**, influence of electrolytes on the swelling of agar, ii, 312.
- swelling and viscosity of Japanese konyaku, ii, 595.
- Dolejšek, V.**, the *N*-series of X-ray spectra, ii, 216.
- Domagk, G.**, chemical composition of cardiac muscle in different diseases, i, 1131.

- Dombovicianu, A.** See *L. Michaelis*.
- Domogalla, B. P.** See *W. H. Peterson*.
- Donald, M. B.**, determination of ammonia by means of sodium hypobromite, ii, 699.
- Donati, A.** See *C. Porlezza*.
- Dondelinger, A.** See *C. Courtot*.
- Doolan, J. J.**, and *J. R. Partington*, tellurium monoxide, ii, 544.
- Doolittle, A. K.**, electrolytic preparation of metanilic acid and its commercial possibilities, i, 631.
- Dorabialska, A.**, thermochemical researches on ketoximes; non-stereoisomeric ketoximes, i, 646.
- Dorcas, M. J.** See *G. P. Baxter*.
- Dorée, C.**, and *L. Hall*, lignosulphonic acid obtained by the action of sulphurous acid on spruce wood, i, 1048.
- Dorfmann, J.**, magneton number and atomic structure, ii, 381.
- Dorgelo, H. B.**, intensities of complex spectral lines, ii, 282.
- Dorgelo, H. B.** See also *H. C. Burger*.
- Dosios, C.**, special case of filtration, ii, 402.
- Dotschewa, M.** See *D. Balareff*.
- Doucet, A.**, action of xanthidrol on semicarbazide, substituted semicarbazides, semicarbazones, and benzoylhydrazine, i, 67.
- Dougherty, G.**, and *L. W. Jones*, reaction velocity of rearrangement of potassium dibenzhydroxamate, i, 853.
- Douglas, G. W.** See *W. R. Atkin*.
- Dowden, H. J.** See *F. D. Chattaway*.
- Downey, W. E.**, relation between the glow of phosphorus and the formation of ozone, ii, 250.
- Downing, F. B.** See *W. S. Calcott*.
- Downs, C. R.** See *J. M. Weiss*.
- Dox, A. W.**, synthetic hypnotics of the barbituric acid series, i, 668.
ethyl-*n*-hexylbarbituric acid and other derivatives of *n*-hexylmalonic acid, i, 1037.
- Dox, A. W.**, and *B. Houston*, acetonylbarbituric acid and some of its derivatives, i, 430.
alkylchloromalonamides; influence of homology on taste, i, 716.
- Dozier, C. C.**, *E. Wagner*, and *K. F. Meyer*, anaerobic bacteria. II. Effect of dextrose on the biochemical activities of *Bacillus botulinus*, i, 1014.
- Dozier, C. C.** See also *E. Wagner*.
- Draper, H. D.** See *P. Finkle*.
- Draves, C. Z.** See *H. V. Tartar*.
- Dreblow, E. S.** See *F. Simeon*.
- Dreibholz, binary and ternary molybdenum alloys**, ii, 233.
- Drescher, (Mlle.) A.**, preparation of chemically pure zinc, ii, 181.
- Drescher, H. A. E.**, *J. Thomas*, and *Scottish Dyes, Ltd.*, preparation of anthraquinone derivatives, i, 861.
- Dresel, K.**, chondroitinsulphuric acid in serum, i, 1123.
- Dresel, K.**, and *H. Rothman*, micro-determination of blood sugar, ii, 632.
- Drew, H. D. K.** See *G. T. Morgan*.
- Dreyer, F.** See *M. Bergmann*.
- Drimmer, I.** See *S. Goldschmidt*.
- Drisaldi, G.** See *G. Charrier*.
- Driver, J. E.**, aromatic orthoformates, i, 1184.
- Driver, J. E.** See also *H. Baines*.
- Druce, J. G. F.**, propylstannonic acid, i, 24.
the preparation and properties of organic stannichlorides. VI. The action of sulphuric acid on certain stannichlorides; the formation of stannisulphates, i, 277.
attempts to prepare a cyanide of tin, i, 380.
volumetric determination of tin, ii, 427.
- Druce, J. G. F.** See also *E. J. Weeks*.
- Drucker, C.**, and *G. Riethof*, constitution of strong electrolytes, ii, 657.
- Drumm, P. T.** See *H. Ryan*.
- Drummond, J. C.** See *E. A. Peach*, and *S. S. Zilva*.
- Duane, W.** See *S. K. Allison*, and *G. L. Clark*.
- Dubois, R.**, can copper salts act simultaneously as oxydases and peroxydases? i, 696.
- Dubois, R.** See also *R. Fosse*.
- Duboux, M.**, inversion of sucrose and determination of hydrogen-ion concentration, ii, 842.
- Duboux, M.**, and *D. Tsamados*, ionisation of some organic acids dissolved in mixtures of water and ethyl alcohol, ii, 827.
- Dubrisay, R.**, capillary analysis, ii, 694.
capillary phenomena appearing at the surface of separation of water and benzene in presence of fatty acids and alkalis, ii, 731.
- Dubrisay, R.**, and *P. Picard*, surface tension at the surface of separation of water and an organic liquid, in presence of aliphatic acids, and of alkalis, ii, 154.
- Duchesne, A.**, and *M. Delépine*, autoxidation of crotonaldehyde; preparation of crotonic acid, i, 1281.
- Duclaux, J.**, chemical valency and luminous radiation. I. The Pictet-Trouton rule, ii, 143.

- Ducloux, E. H.**, use of caesium chloride in microchemistry, ii, 783.
- Dudley, H. W.**, insulin from the cod fish; direct application of picric acid to islet tissue, i, 897.
- Dudley, H. W.**, and **W. W. Starling**, preparation of insulin; alkaline extraction of pancreas, i, 585.
- Due, N. V.** See **E. Billmann**.
- Duecker, W. W.** See **E. J. Fulmer**.
- Dümpelmann, R.**, and **W. Hein**, [effect of gas evolution on] the photoelectric effect, ii, 377.
- Duffendack, O. S.**, and **K. T. Compton**, dissociation of hydrogen and nitrogen by excited mercury atoms, ii, 585.
- Duffieux, M.**, the mass of the particles which emit the several band spectra attributed to nitrogen, ii, 134.
origin of the first and second positive groups of the nitrogen band spectrum, ii, 711.
- Dufford, R. T.**, and **L. Thompson**, spectrum of helium at very low pressures, ii, 800.
- Dufraisse, C.**, and **A. Gillet**, stereochemical investigations in the phenyl styryl ketone series; certain derivatives of dibenzoylmethane and of phenyl styryl ketone, i, 651.
- Dufraisse, C.**, and **H. Moureu**, action of piperidine on phenyl α -bromostyryl ketone; production of a new ketone, phenylbenzylglyoxal, i, 405.
- Dufraisse, C.** See also **C. Moureu**.
- Duhme, E.**, electrolytic preparation of pure iron, ii, 886.
- Dain, C. F. van**, action of inorganic iodides on $\alpha\beta$ -dibromo-compounds. I. Mechanism of the reaction, i, 702.
- Duisberg, W.** See **R. Willstätter**.
- Dukes, H. H.** See **H. D. Bergman**.
- Dulière, W.**, the $\alpha\gamma$ -dichloropropyl ethers and the corresponding acetals, i, 258.
derivatives of γ -chloro-*n*-propyl alkyl ethers, i, 826.
- Dumanski, A. V.**, the properties of colloidal vanadium pentoxide, ii, 195.
- Dumitrescu, D.** See **E. Angelescu**.
- Dunbrook, R.**, and **A. Lowy**, electrolytic oxidation of *p*-nitrotoluene and *p*-chlorotoluene to their respective acids, i, 639.
- Duncan, E. C.** See **H. J. Stander**.
- Duncan, J. T.** See **H. C. Brown**.
- Dundon, M. L.**, surface energy of several salts, ii, 22.
- Dundon, M. L.**, and **E. Mack, jun.**, solubility and surface energy of calcium sulphate, ii, 44.
- Dunkel, M.** See **O. Gerngross**.
- Dunn, F. P.** See **O. L. Brady**.
- Dunn, J. S.**, and **E. K. Rideal**, vapour pressure of hydrochloric acid, ii, 306.
- Dunncliff, H. B.**, determination of carbonates in highly coloured liquids, ii, 701.
- Dupont, G.**, origin of terpenes and crystalline acids in pine resins, i, 657.
acid constituents of the gum of the Aleppo pine. I. α - and β -Alepic acids, i, 1068.
turpentine, i, 1088.
- Dupont, G.**, and **M. Barraud**, essential oil of *Pinus pinea*, i, 866.
composition of the turpentine oils from *Pinus laricio Austriaca* and *Pinus laricio* of Spain, i, 1019.
- Dupont, G.**, and **L. Desalbres**, acid constituents of the gum of the Aleppo pine. II, i, 1068.
- Dupont, G.**, and **R. Uzac**, identity of abietic acids extracted from different colophonies, i, 640.
- Dupont, V.** See **A. Demolon**.
- Dapray, M.**, modification of Isaac's colorimetric determination of blood chlorides, ii, 271.
- Durand, J. F.**, formation of metallic acetylides, i, 602.
metallic acetylides. II. Action of acetylene on metals, i, 1278.
volumetric determination of carbon, ii, 500.
action of permanganic anhydride on the varieties of pure carbon, ii, 546.
apparatus for identifying a gas, ii, 868.
- Durand & Huguenin**, highly chlorinated hydroaromatic products containing nitrogen, i, 631.
preparation of chlorinated amines, i, 957.
- Durau, F.** See **G. C. Schmidt**.
- Dushman, S.**, electron emission from metals, ii, 291.
- Dushman, S.**, **H. N. Rowe**, and **C. A. Kidner**, electron emission from tungsten, thorium, molybdenum, and tantalum, ii, 809.
- Dushman, S.** See also **C. G. Found**.
- Dussik, A.** See **J. Preiss**.
- Dutcher, R. A.** See **Walter Thomas**.
- Duthoit, A.**, antiseptic value of hexamethylenetetramine in vitro, i, 463.
antiseptic effect of hexamethylenetetramine, i, 463.
- Dutt, P. K.**, action of diazo-salts on methanesulphonamide, i, 1031.
- Dutt, S.**, dyes derived from carbazole and thiodiphenylamine, i, 670.

- Duval, M.**, effect of methylamine hydrochloride and ammonium chloride on the physiological osmotic pressure of sodium chloride solutions, i, 1125.
 content of sodium chloride in the blood of certain marine invertebrates, i, 1363.
- Duvinage, R.** See *M. H. van Laer*.
- Dyer, H. A.** See *C. Voegtlin*.
- Dyke, G. D. van.** See *L. P. Sieg*.
- Dyson, G. M.**, and *H. J. George*, reactions of thiocarbonyl chloride. I. Reaction with aromatic primary amino-compounds, i, 1057.
- Dziewoński, K.**, and *T. Stolyhwo*, sulpho-derivatives of acenaphthene, i, 1178.
 the three isomeric naphthol-1:8-dicarboxylic acids and their azo-derivatives; abnormal coupling reactions in the naphthalene series, i, 1199.
- Dziewoński, K.**, and *J. Suszko*, decacyclene. I. Reduction of decacyclene, i, 1056.

E.

- Eadie, G. S.**, *J. J. R. Macleod*, and *E. C. Noble*, insulin and glycolysis, i, 113.
- Eagles, B. A.** See *V. J. Harding*.
- Earl, J. C.**, *Posidonia* fibre. II. The cellulose, i, 945.
- Eastman, E. D.**, statement of the third law of thermodynamics, ii, 143.
X-ray diffraction patterns from crystalline and liquid benzene, ii, 448.
- Eastman, E. D.**, and *R. M. Evans*, equilibria involving the oxides of iron, ii, 413.
- Eastman, E. D.**, *A. M. Williams*, and *T. F. Young*, thermal energy of electrons in metals, ii, 666.
 specific heats of magnesium, calcium, zinc, aluminium, and silver at high temperatures, ii, 681.
- Eastwood, F.** See *G. J. Burrows*.
- Eaton, E. P.** See *E. Ronzoni*.
- Eberhartinger, R.** See *G. Sachs*.
- Eberstaller, H.** See *E. Späth*.
- Ebert, A.** See *W. Dilthey*.
- Ebert, L.**, empirical calculation of the activity-coefficient of simple ions, ii, 524.
- Ebert, L.** See also *H. von Halban*.
- Ebert, R.** See *E. Fromm*.
- Eck, P. N. van**, the occurrence of amines in urine, i, 349.
- Eckart, C. H.** See *K. T. Compton*.
- Ecke, A.**, determination of antimony, ii, 705.
- Eckert, F.**, physical properties of glass, ii, 302.
- Eckert, T. S.** See *W. G. France*.
- Eckstein, H. C.**, fat transport in the body; changes in the lipid content of the blood and lymph during fat absorption in the dog, i, 112.
- Eckwall, P.** See *M. Bergmann*.
- Ectors, E.**, action of organo-magnesium compounds on nitriles, i, 853.
- Eddy, W. P.** See *L. A. Congdon*.
- Eden, R.** See *R. Schwarz*.
- Eden, T.**, colorimetric determination of humic matter in mineral soils, ii, 796.
- Eder, R.**, 1:8-dihydroxy-3-methylanthraquinone, i, 186.
- Eder, R.**, and *C. Widmer*, derivatives of β -methylanthraquinone. III. The synthesis of *Frangula* emodin, i, 185.
- Eder, R.**, *C. Widmer*, and *R. Büttler*, derivatives of β -methylanthraquinone. IV. Nitro-derivatives of β -methylanthraquinone and some of their transformation products, i, 528.
- Edgar, G.**, and *W. H. Schuyler*, esterification equilibria in the gaseous phase, ii, 147.
- Edgar, G.** See also *G. I. Thurmond*.
- Edgeworth, H.** See *H. C. Sherman*.
- Edlbacher, S.**, the proteic acids of the urine. III. Oxyproteic acid, i, 122.
- Edlbacher, S.** [with *K. Erbach*], oxidative and reductive scission of proteins, i, 891.
- Eds, F. de**, and *P. J. Hanzlik*, microvessel with electrode for determining the pH of blood and body fluids, ii, 622.
- Edwards, A. C.** See *S. Morgulis*.
- Edwards, M. G.**, ludwigite from Peru, ii, 494.
- Egan, M. M.** See *A. Pictet*.
- Ege, R.**, determination of free and combined pepsin in stomach contents, ii, 432.
- Egerer-Seham, G.**, ultrafiltration of blood serum and cerebrospinal fluid, i, 680.
- Eggert, J.**, validity of the photochemical law of equivalence in the case of emulsions of silver halides, ii, 82.
 photochemical sensitisation of the [molecular] transformation of maleic esters effected by bromine, ii, 162.
- Eggert, J.** [with *W. Borinski*], photochemical sensitisation of the maleic ester transformation by means of bromine, i, 368.
- Eggert, J.** See also *G. Book*.
- Eggerth, A. H.**, changes in the stability and potential of cell suspensions. II. Potential of erythrocytes, i, 781.

- Ehn, M.** See *W. C. Thro.*
- Ehrenfest, P.**, interference phenomena during the passage of Röntgen rays through a diatomic gas, ii, 369.
- Ehrensperger, H.** See *P. Karrer.*
- Ehrhart, G.** See *T. Curtius.*
- Ehringhaus, A.**, and *R. Wintgen*, absorption of light by finely divided gold in fused borax, ii, 396.
- Eibel, H.** See *M. Bredt-Savelsberg.*
- Eibner, A., O. Merz, and H. Munzert**, tung oil, i, 609.
- Eibner, A.**, and *K. Schmidinger*, quantitative analysis of linseed oil, ii, 131.
- Eibner, A.**, and *E. Semmelbauer*, fish oils; quantitative analysis of sardine blubber, i, 1281.
- Eichert, H.** See *W. Wislicenus.*
- Eichholtz, F.**, absorption of lecithin, i, 444.
presence of vitamin-A in commercial lecithin, i, 454.
- Einleger, J., Jolantha Fischer, and J. Zellner**, chemistry of heterotropic phanerogams, IV., i, 817.
- Eiseman, M.** See *M. Knobel.*
- Eisenlohr, F.**, and *R. Polenske*, stereoisomeric forms of decahydronaphthalene (decalene), i, 1291.
- Eisenman, A. J.** See *J. P. Peters.*
- Eisler, M.**, and *L. Porthheim*, insulin-like substances from beans and their action on carbohydrate metabolism, i, 1271.
- Eisner, W.**, potassium iodide and lead salts, ii, 682.
- Ekeley, J. B.**, and *M. S. Carpenter*, condensation products of diethyl ketone, i, 369.
- Ekeley, J. B.**, and *C. J. Klemme*, additive products of methyl ethyl ketone with chloroform, bromoform, and iodoform, i, 711.
- Eibs, K.**, and *B. Christ*, methylnaphthalenes. I. α -Methylnaphthalenesulphonic acids, i, 719.
- Eldridge, J. A.**, spectrum of mercury below the ionisation potential, ii, 509.
electron theory of the Hall effect, ii, 716.
- Elfein, F.** See *O. Fischer.*
- Ellett, A.** See *R. W. Wood.*
- Ellinger, P.**, pharmacology of cell respiration. IV. Influence of temperature on the spontaneous oxidation of hydrocyanic acid in "Brennorten" ("combustion regions") and on the curve of oxygen consumption of tissues poisoned by potassium cyanide, i, 892.
- Ellingham, H. J. T.**, and *A. J. Allmand*, irreversible electrode phenomena, ii, 599.
- Ellingworth, S.** See *C. H. Browning.*
- Elliott, L. D.**, freezing-point curve of the system, ammonia-water, ii, 672.
molecular lowering of the freezing point of liquid ammonia, ii, 750.
- Ellis, C. D.**, and *H. W. B. Skinner*, the absolute energies of the groups in magnetic β -ray spectra, ii, 85.
a re-investigation of the β -ray spectrum of radium-B and radium-C, ii, 137.
the interpretation of β -ray spectra, ii, 138.
- Ellis, D.**, structure and life-history of the sulphur bacteria. I., i, 1271.
- Ellis, J. W.**, harmonic frequency relations in the infra-red absorption spectra of liquids and solids, ii, 218.
near infra-red absorption spectra of some organic liquids, ii, 219.
- Ellis, O. C. de C.**, and *S. R. Stubbs*, influence of nitrogen dilution on the speed of flame. II., ii, 747.
- Ellis, O. C. de C.** See also *C. Campbell.*
- Elsner, B.** See *W. Fuchs.*
- Elvove, E.**, determination of total sulphur in neosalvarsan and "sulpharsphenamine," ii, 625.
- Elvove, E.**, and *W. M. Clark*, acid-base equilibria of salvarsan solutions, ii, 592.
- Embden, G., A. Abraham, and H. Lange**, significance of ions in muscle functions. II. Influence of sodium fluoride solutions on lactic acid formation in frog-muscle pulp, i, 903.
- Embden, G.**, and *C. Haymann*, significance of ions in muscle functions. IV. Enzymic synthesis of lactacidogen under the influence of ions, i, 1138.
- Embden, G.**, and *E. Lehnartz*, significance of ions in muscle functions, i, 903.
- Emden, F.** See *H. Scheibler.*
- Emschwiller, G.** See *A. Job.*
- Engel, H.** See *J. von Braun, and K. Fries.*
- Engel, K.**, mode of action of phosphorus, i, 1011.
- Engeland, R.**, and *W. Biehler*, compounds extracted from human skeletal muscle, i, 1131.
- Engelbertz, P.** See *J. von Braun.*
- Engelhardt, R.** See *W. Lommel.*
- Engelhardt, W.**, action of antiphenolase in an adsorbed condition, i, 1269.
- Engelstad, A.** See *C. F. Cross.*

- Engfeldt, N. O.**, determination of acetone and β -hydroxybutyric acid in small quantities of urine, ii, 428.
- English, F. L.** See *W. S. Calcott*.
- Enklaar, C. J.**, oxidation of *allo*-ocimene, ocimene, and myrcene, i, 531.
- Ephraim, F.**, triple salts, ii, 107.
change of volume accompanying formation of compounds, ii, 315, 464.
- Ephraim, F.**, and *P. Mosimann*, double halides of cobalt bases, ii, 116.
- Eppley, M.** See *W. C. Vosburgh*.
- Epstein, E.**, chemistry of Gaucher's disease, i, 791.
- Erbach, K.** See *S. Edlbacher*.
- Erben, A.** See *A. Zinke*.
- Erbsen, H.** See *K. Harpuder*.
- Erdenbrecher, A. H.**, the action of hydrogen peroxide on the precipitation of zinc salts with sodium metasilicate, ii, 181.
preparation of calcium persulphate, ii, 337.
preparation of persilicates, ii, 473.
concentration of Merck's "perhydrol" [hydrogen peroxide], ii, 603.
- Erfe, E.** See *W. Küster*.
- Erikson, E.** See *H. von Euler*.
- Erikson, H. A.**, silver chloride battery for potential purposes, ii, 458.
- Eriksson, E.** See *K. Sjöberg*.
- Erlach, A.**, and *W. Pauli*, general colloid chemistry. XI. Analysis and constitution of silver sols. II., ii, 532.
- Errera, J.**, bitumen of Judæa; the sensitivity of bitumen to light as a function of its degree of dispersity, ii, 55.
colloidal supports for [solutions when] obtaining emission spectra, ii, 802.
specific inductive capacity of colloidal solutions, ii, 810.
- Erskine, A. M.** See *R. P. Anderson*.
- Escher-Desrivieres, J.**, removal of polonium from a sodium hydroxide solution by different (adsorbing) substances, ii, 596.
adsorption of polonium by silver chloride, ii, 736.
- Espine, J. d'.** See *D'Espine*.
- Estienne, V.** See *H. Colin*.
- Etheridge, A. T.**, volumetric determination of vanadium in steel, ii, 67.
determination of copper and tin in copper-tin alloys, ii, 702.
- Eucken, A.**, formation of ozone at low temperature and pressures, ii, 159.
- Eucken, A.**, and *E. Karwat*, determination of heat content of some condensed gases, ii, 820.
- Eucken, A.**, and *O. Neumann*, the Wiedemann-Franz law. I., ii, 648.
- Euler, A. C. von**, determination of lignin in wood by the method of Schmidt and Graumann, ii, 129.
- Euler, H. von**, water- and fat-soluble growth catalysts (*D*-vitamins), i, 588.
- Euler, H. von**, and *E. Erikson*, hydrodiffusion experiments. I., ii, 836.
- Euler, H. von**, and *K. Helleberg*, rotation of the maltose produced by fermentation of starch by malt extract, i, 1266.
- Euler, H. von**, and *K. O. Josephson*, invertase. III. and IV., i, 466, 799.
affinity of invertase for different sugars, i, 467.
invertase as an amphoteric electrolyte and as a colloid, i, 693.
enzymic equilibria. I., i, 918.
decomposition of invertase by enzymes. I. and II., i, 1143.
enzymic methylglucoside equilibrium, i, 1266.
mode of action of invertase, i, 1382.
- Euler, H. von**, *K. O. Josephson*, and *K. Myrbäck*, calculation of the activity-*ph* curve of invertase, i, 801.
- Euler, H. von**, *K. O. Josephson*, and *B. Söderling*, enzyme in *Penicillium glaucum* which hydrolyses sucrose, i, 1270.
- Euler, H. von**, and *K. Myrbäck*, the fermentation co-enzyme (co-*zymase*) of yeast. I., II. and III., i, 248, 693, 918.
fermentation co-enzyme (co-*zymase*) of yeast. V. The rôle of the co-enzyme in fermentation, i, 1265.
- Euler, H. von**, *K. Myrbäck*, and *E. Rudberg*, course of the mutarotation of dextrose, i, 614.
- Euler, H. von**, and *R. Nilsson*, sorptive power of metallic hydroxides [for invertase]. II., i, 808.
the adsorptive power of metallic hydroxides. I., ii, 23.
equilibrium of colloidal aluminium and lanthanum hydroxides with dilute acids and bases, ii, 264.
- Euler, H. von**, and *E. Waller*, inactivation of invertase in fresh yeast by silver nitrate, i, 466.
- Euler, H. von**. See also *K. O. Josephson*, and *K. Myrbäck*.
- Evans, F. A.** See *V. E. Rothberg*.
- Evans, G. T. R.** See *H. H. Paine*.
- Evans, R. M.** See *E. D. Eastman*.
- Evans, U. R.**, the law of definite proportions in the light of modern research, ii, 146.
influence of obstructive films on anodic processes, ii, 599.

- Evans, U. R.**, relation between tarnishing and corrosion, ii, 764.
Evans, U. R., and **L. L. Bircumshaw**, theory of colloid phenomena, ii, 236.
Evenden, J. See **D. Rapport** and **R. Weiss**.
Everett, H. S., **S. Bayne-Jones**, and **D. W. Wilson**, precipitin reactions of a crystalline globulin from human urine, ii, 431.
Eversole, W. G. See **J. N. Pearce**.
Eweyk, C. van. See **P. Rona**.
Ewing, J. See **W. H. Pearsall**.
Exss, I. See **W. Borsche**.
Eynon, L. See **J. H. Lane**.

F.

- Fabinger, J.** See **F. Jirsa**.
Fabre, R., analysis of liquid produced in a state of general oedema, i, 909.
Fabre, R., and **H. Pénau**, amylolytic enzymes, ii, 132.
Fabre, R. See also **E. Bayle**.
Fabregue, and J. Bressier, detection of bismuth in urine and cephalo-rachidian fluid, ii, 629.
Fachini, S., and **S. Somazzi**, determination of glycerol and of trimethylene glycol, ii, 789.
Fahr, K. See **C. A. Rojahn**.
Faillebin, M., hydrogenation of certain ketones in presence of pure or impure platinum black, i, 13.
 preparation of *n*-hexane, i, 601.
Fairbrother, F., dissolution of gelatin, ii, 592.
Fairhall, L. T., lead. IX. Solubility of various lead compounds in blood-serum, i, 1252.
 lead. VIII. The microchemical detection of lead, ii, 61.
 lead. VII. Equilibrium in the system, lead oxide-phosphoric anhydride-water at 25°, ii, 612.
 lead. XI. Rapid determination of lead in urine, ii, 873.
Fairhall, L. T., and **C. P. Shaw**, deposition of lead salts [in bone]; solubilities of lead phosphates in water and lactic acid solution, ii, 682.
Fajans, K., and **O. Hassel**, new method of titrating silver and halogen ions with organic dyes as indicators, ii, 60.
Fajans, K., and **G. Joos**, molecular refraction of ions and molecules and atomic structure, ii, 372.
Fajans, K., and **H. Wolff**, titration of silver and halogen ions using dyes as indicators, ii, 776.
Falck, R., a crystalline metabolic product from *Sparassis ramosa*, i, 356.
Falck, R., and **van Beyma thoe Kingma**, preparation of organic acids by biological methods with the help of hyphenated moulds, i, 916.
Falck, R., and **S. N. Kapur**, production of gluconic acid by hyphenated moulds, i, 917.
Falk, K. G., (*Miss*) **H. M. Noyes**, and **K. Sugura**, enzyme action. XXV. Comparative lipase and protease actions of the Flexner-Jobling rat carcinoma and of different rat tissues. XXVI. Comparative lipase and protease actions of different beef tissues. XXVII. Comparative enzyme actions of tissue mixtures and of tumour-tissue mixtures in relation to the comparative enzyme actions of tumour extracts alone, i, 696.
Falk, K. G. See also **G. McGuire** and (*Miss*) **H. M. Noyes**.
Falkenhause, M. von, amino-acid content of the blood and its significance as a test of liver function, i, 1365.
Faltis, D. See **J. Vintilescu**.
Faltis, F., and **A. Suppan**, constitution of morphine, i, 1100.
Fanconi, G., serum lipase, i, 472.
Farbenfabriken vorm. F. Bayer & Co., preparation of arsenic acid derivatives of aliphatic carboxylic acids, i, 153.
 preparation of aminoazo-compounds, i, 1120.
Farbwerke vorm. Meister, Lucius, & Brüning, preparation of mixed esters of phthalic acid, i, 46.
 preparation of derivatives of arsenobenzenes stable in solution, i, 108.
 process for converting halogen substitution products of hydrocarbons into hydrocarbons, or other halogen substitution products of hydrocarbons, containing a higher number of carbon atoms, i, 131.
 aliphatic dialkylaminoalkyl compounds, i, 151.
 methyl sulphites of secondary aromatic aliphatic amines, i, 160.
 preparation of diaminodiarlyldialkylmethanes, i, 670.
 preparation of nitriles from acid amides, i, 1065.
 ketobutyric acids, i, 1069.
 dialkylaminoalkylcamphors, i, 1084.
 preparation of a mercury quinine compound, i, 1096.
 halogenated ketodihydroaryl-*p*-thiazines, i, 1118.

- Farbwerke vorm. Meister, Lucius, & Brüning**, derivatives of arylamino-mercaptanaphthaquinones, i, 1326.
preparation of thio- or seleno-derivatives of primary aromatic amines, i, 1353.
- Farther, R. G.**, and **L. Higginbotham**, micro-analytical methods for the examination of small quantities of waxes, in particular cotton wax, ii, 353.
- Farmer, W.**, and **J. B. Firth**, the influence of catalysts on the production of potassium perchlorate by the action of heat on potassium chlorate, ii, 173.
catalytic activity of carbons from aromatic hydrocarbons and some derivatives, ii, 343.
- Farmer, W.** See also **J. B. Firth**.
- Farrow, A. G.** See **U. A. Oschwald**.
- Farup, F., W. Fleischer**, and **E. Holtan**, electrical conductivity of fused silicates, ii, 680.
- Farwig, K.**, normal and selective photoelectric effects associated with the alkali metals, ii, 223.
- Faurholt, C.** See **C. Matignon**.
- Fawsitt, C. E.**, and **C. H. Fischer**, miscibility test for eucalyptus oils, i, 757.
- Fazi, Remo de**, indones. V. Conversion of 3-phenyl-2-methylindone into diphenyldimethyltruxones by the action of ultra-violet rays, i, 53, 652.
reaction of aldehydes. III., i, 1319.
preparation of thiocarbonyl chloride. II., ii, 475.
- Fearon, W. R.**, urease. II. The mechanism of the zymolysis of urea, i, 351.
- Fearon, W. R.**, and **E. G. Montgomery**, chemistry of amino acid deamination, i, 398.
- Fedotéev, P. P.**, the production of manganese by electrolysis of aqueous solutions of its salts, ii, 49.
- Fedotéev, P. P.** [with **A. von Lebedev**], absorption spectra of coloured glass, ii, 472.
- Fedotéev, P. P.**, and **W. P. Iljinsky**, the fusibility of the ternary system, sodium fluoride-calcium fluoride-aluminium fluoride, ii, 107.
- Fedotéev, P. P.**, and **A. Kolossov**, the third form of the ammonia-soda process, ii, 43.
- Fedotéev, P. P.**, and **T. Petrenko**, iron oxide as material for insoluble anodes, ii, 15.
- Fedotéev, P. P.**, and **W. W. Stender**, the preparation of zinc by electrolysis of sulphate solutions, ii, 45.
- Fedotéev, P. P.**, and **N. Woronin**, the technical electrolysis of fused carnallite, ii, 45.
- Feigl, F.**, qualitative micro-analysis, ii, 206.
compounds of quadrivalent nickel with dimethylglyoxime and a sensitive test for nickel, ii, 504.
reagent for the determination of antimony, ii, 571.
- Feigl, F.**, and **A. F. Lederer**, relationship between atomic grouping and specific affinity. II. Diphenylcarbazon, its salts, and those of the supposed diphenylcarbodiazone, i, 1356.
- Feigl, F.**, and **F. Pavelka**, detection and determination of small quantities of calcium and magnesium by means of ammonium ferrocyanide, and a new nephelometric method for the determination of the hardness of water, ii, 784.
- Feigl, F.**, and **H. Rubinstein**, complex compounds of cobalt with dimethylglyoxime, i, 20.
- Feigl, F.**, and **O. Schummer**, use of antimony trichloride for the volumetric determination of hypochlorites, ferri- and ferro-cyanides, ii, 624.
- Feigl, F.**, and **L. von Tustanowska**, colour reaction between cobalt salts and dimethylglyoxime in the presence of sulphides, ii, 504.
- Feigl, F.**, and **F. Weiner**, reaction between permanganate and arsenite in alkaline solution, ii, 645.
- Feinberg, C.**, **J. Herrmann**, **L. Rögl-sperger**, and **J. Zellner**, comparative plant chemistry. IX. Chemistry of barks. I., i, 814.
- Feist, F.**, 3-methylcyclopropene-1:2-dicarboxylic acid, i, 511.
- Feist, K.**, and **H. Bestehorn**, oak-wood tannin; preparation and purification of tannins. I., i, 1213.
- Feit, H.** See **G. Jander**, and **K. Lindner**.
- Feitknecht, W.**, effect of canal-rays on crystals, ii, 815.
- Felbeck, G. T.** See **G. A. Goodenough**.
- Felcher, A.** See **J. H. Hess**.
- Felix, K.**, basic peptones from the mucous membrane of the stomach, i, 790.
- Felix, K.**, and **K. Morinaka**, arginine metabolism, i, 450.
- Fellenberg, T. von**, investigations on iodine metabolism. I. Experiments with physiological quantities of iodine on adults, i, 114.

- Fellers, C. R., O. E. Shostrom, and E. D. Clark**, determination of hydrogen sulphide in bacterial cultures, ii, 777.
- Fellner, O. O.**, hormone of the placenta and of the corpus luteum and the lipids of the corpus luteum, i, 1017.
- Felsher, A. R.** See **C. C. Wang**.
- Felton, L. D.**, a substitute for acid hæmatin as the standard in Sahli's hæmoglobinometer, ii, 212.
- Fenger, F., and R. S. Wilson**, amount of available insulin in the pancreas of domestic animals, i, 684.
- Ferber, E.** See **K. Brass**.
- Ferber, J.** See **W. Arnoldi**.
- Ferguson, A. L., and G. van Zyl**, measurement of decomposition potentials, ii, 458.
- Ferguson, J.** See **R. M. Caven**.
- Ferguson, J. B.** See **G. A. Williams, and J. W. Rebbeck**.
- Fernandes, L.**, use of molybdenum as indicator in the volumetric determination of zinc, ii, 785.
fractionation of the cerium earths and separation of the various groups of rare earths, ii, 861.
- Fernandes, L.** See also **L. Rolla**.
- Fernández, O., and T. Garmendia**, biology of *Bacillus coli communis*; attempts at "dysmutation," i, 247.
determination of amino-acids in the presence of ammonium salts, ii, 355.
- Fernau, A.**, action of penetrating radium rays on gels, ii, 729.
- Fernbach, A., and N. Schiller**, rôle of the reaction of the medium in selective fermentation, i, 917.
- Fernbach, A., and M. Schoen**, is lactic acid produced in alcoholic fermentation? i, 249.
- Ferrari, A.** See **G. R. Levi**.
- Ferrero, P.** See **E. Briner**.
- Ferrier, G. S.** See **W. M. Cumming**.
- Ferrières**, ultra-violet absorption spectrum of gaseous ammonia, ii, 139.
- Ferrini, A.**, behaviour of formaldehyde, i, 1164.
- Ferry, R. M.**, chemistry of hæmoglobin. I. The preparation of hæmoglobin, i, 102.
chemistry of hæmoglobin. II. Equilibrium between oxygen and hæmoglobin, i, 780.
- Fester, G., and G. Brude**, the decomposition of carbon monoxide, ii, 173.
[oxidation of] carbon monoxide, ii, 254.
- Fetkenheuer, B., and A. Konarsky**, determination of magnesium in aluminium, zinc, and lead alloys, ii, 702.
- Feulgen, R., and H. Rossenbeck**, microchemical detection of a nucleic acid of the thymus-nucleic acid type and the selective coloration dependent thereon in microscopic preparations, i, 905.
- Feulgen, R., and K. Voit**, mechanism of "nuclear" staining. I. Detection of reducing groups in the nuclei of partly hydrolysed microscopic preparations, i, 905.
mechanism of "nuclear" staining. II. Behaviour of the nucleus of partly hydrolysed microscopic preparations to magenta-sulphurous acid after preliminary treatment with phenylhydrazine, i, 905.
groups responsible for the nuclear coloration and nuclear reaction, i, 1132.
- Feussner, O.**, change in the temperature coefficient [of electrical conductivity] of pure platinum by mechanical treatment, ii, 224.
Bohr's atomic theory and electrical conductivity, ii, 716.
- Fichter, F.**, electrochemical oxidation of aromatic hydrocarbons, i, 629.
- Fichter, F., and W. Dietrich**, electrochemical oxidation of alkyl ethers of phenol and of the three isomeric dihydroxybenzenes, i, 282.
- Fichter, F., and F. Kuhn**, oxidation of amino-acids with hydrogen peroxide and at the anode, i, 378.
- Fichter, F., and H. Bis**, electrochemical oxidation of the three tolyl methyl ethers, i, 1060.
- Fiechtl, A.** See **A. Gutbier**.
- Field, (Miss) E.**, quebrachamine, i, 1095.
- Field, H.** See **A. V. Bock, and L. J. Henderson**.
- Fierz-David, H. E., and M. Braunschweig**, β -naphthylamine-5:7- and -6:8-disulphonic acids, i, 158.
- Fierz-David, H. E., and A. W. Hasler**, the disulphonation of naphthalene, i, 156.
- Fierz-David, H. E., and Walter Müller**, camphorylcarbamates and their physiological action, i, 301.
- Fieser, L. F.** See **J. B. Conant**.
- Fikentscher, H.** See **K. Freudenberg**.
- Findlay, A., and William Thomas**, influence of colloids on the rate of reactions involving gases. II. Decomposition of hydrogen peroxide and of nitrosotriacetoneamine, ii, 539.

- Findlay, D. M.** See *P. J. Moloney*.
- Findlay, G. M.**, a preliminary note on the destruction of vitamin-B by age, i, 346.
- Fink, W. L.** See *A. W. Smith*.
- Finkel, J.** See *N. S. Kurnakov*.
- Finkle, P., H. D. Draper, and J. H. Hildebrand**, theory of emulsification, ii, 97.
- Finn, O.** See *J. Meisenheimer*.
- Fioroni, W.** See *P. Karrer*.
- Firth, J. B., W. Farmer, and J. Higson**, sorption of iodine by carbons prepared from paraffin hydrocarbons, carbon dioxide, aromatic hydrocarbons and derivatives, and from the products of oxidation of wood charcoal with fuming nitric acid, ii, 328.
- Firth, J. B., and F. S. Watson**, catalytic decomposition of hydrogen peroxide solutions by blood charcoal, ii, 542.
- Firth, J. B.** See also *W. Farmer*.
- Fischer, A.**, carbohydrate metabolism of *Ascaris megalocephala*, i, 449.
- Fischer, C. H.** See *C. E. Fawsitt*.
- Fischer, F.**, behaviour of cellulose and lignin during decay, i, 715.
- Fischer, F., and W. Krönig**, reactions occurring during the discharge of the oxygen-hydrogen cell, ii, 542.
- Fischer, F., and H. Tropsch**, comparative investigations of cellulose and lignin, i, 148.
- Fischer, F., and H. Tropsch** [with *W. Krönig*], the synthesis of higher members of the aliphatic series from carbon monoxide, i, 131.
- Fischer, F., and C. Zerbe**, determination of organic vapours in gas mixtures by means of active charcoal, ii, 630.
- Fischer, H.**, [tri-indolylmethanes and aldehydes, ketones, ketonic esters, and keto-nitriles of substituted indoles], i, 420.
[spectroscopic chemical reactions of porphyrins and their derivatives], i, 1131.
- Fischer, H., and H. Ammann**, some transformations of 3-acetyl-2:4-dimethylpyrrole; tripyrrylmethanes. I., i, 78.
- Fischer, H., and J. Hilger**, natural porphyrins. VIII. Occurrence of urinoporphyrin (as copper salt, turacin) in turakoo birds and the demonstration of coproporphyrin in yeast, i, 1130.
- natural porphyrins. X. Blood pigments in yeast; detection of porphyrin in plants, i, 1131.
- Fischer, H., H. Kämmerer, and A. Kühner**, natural porphyrins. XI., i, 1256.
- Fischer, H., and F. Kögl**, the natural porphyrins. IV. Ooporphyrin, i, 230.
acetobromomaltose, i, 498.
natural porphyrins. IX. Ooporphyrin from plovers' egg shells and its relationship to blood pigments, i, 1130.
- Fischer, H., and Joachim Müller**, synthetic researches on the constitution of bile pigments. II., i, 319.
- Fischer, H., and C. Nenitzescu**, synthesis of the acid scission products of blood pigment. II. Synthesis of phyllopyrrolecarboxylic acid, i, 1233.
- Fischer, H., and G. Niemann**, bile pigments. VIII. Mesobiliviolin, mesobiliviolinogen, and the condensation of mesobilirubinogen with aldehydes; bisazo pigment from mesobilirubin, i, 1092.
- Fischer, H., and K. Pisbor**, tri-indolylmethanes and aldehydes, ketones, ketonic esters, and keto-nitriles of substituted indoles, i, 86.
- Fischer, H., and H. Scheyer**, action of bromine on substituted pyrroles and syntheses of α -brominated dipyrrole-methene dyes, i, 80.
action of halogens on substituted pyrroles; synthesis of a dipyrrolethane and of a colouring matter with four pyrrole nuclei in its molecule, i, 1232.
- Fischer, H., and K. Schneller**, natural porphyrins. VI. Distribution of porphyrins in organs; detection of a porphyrin in yeast, i, 894.
- Fischer, H., and M. Schubert**, tetrapyrrolethanes. I., i, 217.
synthetic experiments with the fission products of the blood pigments and the formation of complex salts from dipyrrolemethenes. II., i, 544.
- Fischer, H., and K. Smeykal**, some new *N*-substituted pyrrole-aldehydes; and oxindole-aldehyde, i, 201.
di- β -pyrrylmethenes. I., i, 544.
- Fischer, H., and B. Weiss**, synthesis of the acid scission products of blood pigment. I. Synthesis of cryptopyrrolecarboxylic acid, i, 543.
- Fischer, H., and W. Zerweck**, natural porphyrins. V. Coproporphyrin in the urine and serum in normal and pathological conditions, i, 459.

- Fischer, H.**, and **W. Zerweck**, natural porphyrins. VII. Urinoporphyrinogen heptamethyl ester and a new conversion of urino- into coproporphyrin, i, 1129.
urinary pigment in normal and pathological conditions, i, 1136.
- Fischer, H.** See also **G. Scheibe**.
- Fischer, H. O. L.**, and **H. Mildbrand**, dihydroxyacetone, i, 613.
- Fischer, H. O. L.**, and **C. Taube**, dihydroxyacetone (II) and a new method of preparing methylglyoxal, i, 1167.
- Fischer, J.** See **W. Dilthey**.
- Fischer, Jolantha.** See **J. Einleger**.
- Fischer, M. H.**, electrical resistance of phenol-water systems near the critical solution temperature, ii, 234.
electrical resistance of soap-water systems at the setting-point, ii, 312.
electrical resistance of protein-water systems, ii, 728.
- Fischer, O.** [with **E. Thiel**, **F. Stauber**, **W. Hild**, **G. Seufert**, **H. Hojer**, **F. von Mann-Siechler**, **F. Elflein**, and **K. Müller**], the constitution of the products arising from the condensation of *o*-aminoazo-compounds with aldehydes. II., i, 559.
- Fischer, W. M.**, and **Arvid Schmidt**, determination of alcohols. I. Methyl alcohol, ii, 427.
- Fischli, A.** See **P. Ruggli**.
- Fisher, E. A.**, imbibitional soil moisture, i, 819.
freezing of water in capillary systems, ii, 391.
discontinuity of the drying process, ii, 454.
- Fisher, J. W.**, supposed limitation of the second law of thermodynamics, ii, 384.
- Fisher, N. F.**, preparation of insulin, i, 683.
- Fisher, N. F.** See also **A. C. Ivy**.
- Fitzgerald, D.** See **L. A. Congdon**.
- Flaschenträger, B.** See **H. Wieland**.
- Flath, A.** See **Erich Müller**.
- Fleisch, A.**, some oxidation processes of normal and cancer tissue, i, 785.
- Fleischer, K.** See **E. Wedekind**.
- Fleischer, W.** See **F. Farup**.
- Fleischmann, F.** See **R. Scholl**.
- Fleissner, M.** See **J. Przeborowski**.
- Fleming, A.**, comparison of the activities of antiseptics on bacteria and on leucocytes, i, 691.
- Fleming, R.**, sensitive reactions for copper, ii, 502.
- Flemming, W.** See **R. Koetschau**.
- Fleuret, P.** See **E. F. Terroine**.
- Fleury, P.**, determination of the activity of a laccase, i, 594.
action of laccase; influence of concentration of guaiacol and pressure of oxygen, i, 697.
use of guaiacol for measuring the activity of oxydase preparations, i, 921.
laccase, i, 1144.
laws of the action of laccase; influence of the reaction of the medium, i, 1379.
determination of copper by the thio-cyanate process and its application to the determination of dextrose, ii, 425.
- Fleury, P.**, and **H. Levaltier**, determination of nitrogen by Kjeldahl's method and its modifications, ii, 273.
- Fleury, P.**, and **P. Tavernier**, determination of copper by Zecchini's method and its application to the determination of reducing sugars, ii, 627.
determination of dextrose in presence of lactose by means of copper acetate, ii, 789.
- Flössner, O.**, liquid from *Taxia echinococcus*, i, 590.
- Flood, E. G.**, rate of sugar absorption in the newborn, i, 1255.
- Florence, G.** See **L. Hugounenq**.
- Florentin, D.**, sulphochromic oxidation of organic substances and coals in presence of catalysts, i, 601.
- Florentino, U.** See **E. Cardoso**.
- Florescu, L.** See **M. A. Mihailescu**.
- Flürscheim, B.**, electronic theory of valency, ii, 227.
- Flumiani, G.**, tetrahydroxydimethyl-anthraquinone, i, 1327.
- Fodor, A.**, and **D. Schoenfeld**, colloidal nature of clay, ii, 156.
- Földi, Z.**, the syntheses of arsenic acids by means of diazonium salts, i, 235.
- Foerster, E.** See **O. Ruff**.
- Foerster, F.** [with **O. Jensen**, and **A. Tenne**], electrolysis of hypochlorite solutions, ii, 749.
- Foerster, F.**, and **E. T. Mommsen**, thio-sulphates, ii, 248.
- Förster, J.**, rarefied air and blood regeneration by "hæmopoietins," i, 680.
- Förster, J.** See also **A. Loewy**.
- Folin, O.**, nesslerisation and avoidance of turbidity in nesslerised solutions, ii, 498.
- Folin, O.**, and **H. Trimble**, blood analysis. V. Improvements in the preparation of uric acid reagent, ii, 634.

- Folkmar, E. O.**, the rôle of certain carbohydrates in the organism, i, 246.
- Fonseca, F.**, determination of incoagulable nitrogen (residual nitrogen), ii, 273.
- Fontès, G.**, and **L. Thivolle**, micro-analytical separation of iron and phosphoric acid, ii, 503.
- Fonteyne, P.**, and **P. Inglebrecht**, creatinine in the blood, i, 1253.
- Foot, H. W.**, and **S. B. Smith**, equilibrium in the system, sodium phthalate-sodium sulphate-water, i, 399.
- Foot, P. D.**, and **A. E. Ruark**, electrodeless discharge, ii, 801.
- Foot, P. D.** See also **T. R. Harrison**, **F. L. Mohler**, and **A. E. Ruark**.
- Forbes, G. S.**, and **L. P. Hall**, oxidation potentials at mercury electrodes. III. Ter- and bi-valent titanium, ii, 316.
- Ford, F. L.** See **P. E. Wedgwood**.
- Fordonski, M.** See **K. Jablczynski**.
- Fordyce, J. A.**, **I. Rosen**, and **C. N. Myers**, syphilis. V.-VIII. Arsenic content of the blood and spinal fluid after neosalvarsan and salvarsan treatment, i, 584.
- Foresti, B.**, catalysis by the action of subdivided metals. II. Thermal effect of the hydrogenation of ethylene at the surface of finely-divided nickel, ii, 320.
- Forestier, H.** See **G. Chaudron**.
- Forrai, E.**, glycerophosphatase in human organs, i, 120.
saccharophosphatase in human organs, i, 456.
fructosediphosphatase in human organs. I., i, 594.
differentiation of human phosphatases, i, 594.
- Forrer, R.** See **P. Weiss**.
- Forster, H.**, microchemical determination of lipoids by Bang's method, ii, 796.
- Forster, T. A.**, and **I. M. Heilbron**, interaction of ethyl acetoacetate with *o*-hydroxystyryl ketones, i, 413.
- Forster, T. A.** See also **I. M. Heilbron**.
- Forstner, G. E.** See **E. A. Cooper**.
- Forsyth, R.**, **J. A. Moore**, and **F. L. Pyman**, sulphonation of glyoxalines. II., i, 669.
- Forth, H.** See **H. Lindemann**.
- Fortrat, R.**, new hydrocarbon band, ii, 365.
behaviour of the oxygen band 3064 Å. in a magnetic field, ii, 366.
- Fortsch, A. R.** See **J. N. Pearce**.
- Foshag, W. F.**, and **R. B. Gage**, chlorophenicate, a new mineral from Franklin Furnace, New Jersey, ii, 773.
- Fosse, R.**, **P. Hagène**, and **R. Dubois**, action of hydrazine on hydantoin and allantoin, i, 436.
determination of cyanamide as dioxanthylcarbamide, ii, 634.
- Fosse, R.**, **A. Hieulle**, and **L. W. Bass**, action of hydrazine on uracil and thymine, i, 428.
- Fossey, A. M. de.** See **P. Le Noir**.
- Foster, D. G.**, and **E. E. Reid**, influence of sulphur on the colour of azo-dyes, i, 1243.
- Foster, D. L.**, and **C. E. Woodrow**, relation between the pancreas and the carbohydrate metabolism of muscle; effect of extracts from the gland on lactic acid production in vitro, i, 897.
- Foster, J. S.**, a six-prism glass spectrograph, and a neutral wedge, ii, 323.
Stark effect in hydrogen and helium, ii, 511.
fine analysis of the Stark effect in Balmer's series by Lo Surdo's method, ii, 798.
- Found, C. G.**, and **S. Dushman**, ionisation gauge. II. Relation between ionisation current at constant pressure and number of electrons per molecule, ii, 586.
- Fourneau, E.**, and **S. Kanao**, synthesis of ephedrine, i, 978.
- Fourneau, E.**, **J. Tréfouël**, (*Mmc.*) **J. Tréfouël**, and **J. Vallée**, new series of trypanocidal drugs, i, 382.
chemotherapeutical researches in the series 205 Baeyer; carbamates of theaminobenzoylaminonaphthalene-sulphonic acids, i, 504.
- Fowler, A.**, series spectrum of ionised carbon (C^+), ii, 285.
- Fowler, G. J.**, and **Y. N. Kotwal**, chemical factors in denitrification, i, 1023.
- Fowler, R. H.**, statistical equilibrium and mechanism of ionisation by electronic impacts, ii, 221.
- Fowles, G.**, instability of cupric hydroxide, ii, 111.
- Fox, F. W.**, and **J. A. Gardner**, cholesterol content of human milk, i, 590.
- Francesconi, L.**, and **A. Ciurlo**, behaviour of acetylene towards nitrogen, i, 1352.
- Francis, G. V.** See (*Sir*) **J. C. Irvine**.
- Fraenkel, J.**, electrical double layer on the surface of solid and liquid bodies. II. Surface tension, ii, 528.
- Fränkel, S.**, **H. Gallia**, **A. Liebster**, and **S. Rosen**, products of prolonged tryptic digestion of casein, i, 677.

- Fränkel, S.**, and **G. Gruber**, action of the Grignard reagent on cocaine; tropyldimethylcarbinol, i, 72.
- Fraenkel, W.**, and **H. Heinz**, chemical kinetics of the solution of alkali and alkaline-earth metal amalgams in acids, ii, 475.
- Fraenkel, W.**, and **E. Heymann**, kinetics of the tempering process in steel, ii, 490.
- Fraenkel, W.** See also **R. Lorenz**.
- France, W. G.**, and **T. S. Eckert**, platinised aluminum cathodes in electroanalysis, ii, 695.
- France, W. G.**, and **D. McBurney**, effect of hydrophilic colloids on size and distribution of particles in electrolytic precipitation. I. Gelatin and basic lead carbonate, ii, 314.
- France, W. G.**, and **W. H. Moran**, influence of gelatin on the transport numbers of hydrochloric acid, ii, 148.
- Francis, F. E.** [with **W. F. Millard**, **C. H. Rutt**, **C. M. Watkins**, **R. W. Wallington**, and **C. P. Garner**], velocity of oxidation of paraffin wax. I.-IV., i, 357.
- Franciscis, V. de.** See **M. Giau**.
- Franck, J.**, ionisation potential of positive ions, ii, 715.
- Francois, M.**, and **C. Lormand**, detection and determination of tartaric acid, ii, 129.
- Frank, R.** See **W. Borsche**.
- Franke, A.**, and **Theodor Köhler**, the behaviour of some homologues of acetone with alkaline condensing agents, i, 6.
- Frankert, M.**, and **J. A. Wilkinson**, adsorption from salt solutions by colloidal copper ferrocyanide, ii, 734.
- Franklin, E. C.**, systems of acids, bases, and salts, ii, 850.
- Frankowski, R.** See **K. Jabłczyński**.
- Franquet, R.** See **H. Colin**.
- Franz, A.**, and **H. Lütze**, determination of carbon by the wet method, ii, 500.
- Fraundorfer, H.** See **L. Köfer**.
- Frazer, E. B.** See **W. R. Meeker**.
- Frazer, J. C. W.** See **B. F. Lovelace**, and **W. A. Whitesell**.
- Fred, E. B.**, influence of nitrifying bacteria on the growth of barley, i, 1393.
- Fred, E. B.** See also **W. H. Peterson**, and **E. G. Schmidt**.
- Fredericq, H.**, and **L. Brouha**, vasodilatation by amino-acids in isolated dog kidneys, i, 461.
- Fredericq, H.**, and **L. Mélon**, effect of amino-acids on exchanges in isolated organs, i, 461.
- Free, E. E.** See **W. A. Cannon**.
- Freedman, L.** See **C. Funk**.
- Freeth, F. A.**, ternary and quaternary equilibria in the system, NaClO_4 -(NH_4)₂SO₄- NH_4ClO_4 - Na_2SO_4 - H_2O at 60° and 25°, ii, 336.
- Fremery, W.** See **R. Willstätter**.
- French, (Miss) H. S.**, and **T. M. Lowry**, absorption spectra and co-ordination of some cupric compounds. I., ii, 804.
- French, (Miss) H. S.** See also **T. M. Lowry**.
- Frèrejacque, M.** See **L. T. Simon**.
- Frerichs, R.**, the band spectrum of copper, ii, 77.
- Frers, J. N.**, constitution of solid electrolytes, ii, 827.
- Fresenius, L.** See **O. Lemmermann**.
- Fresno, C. del**, electrolytic oxidation of formaldehyde, i, 612.
- Freter, K.** See **E. Koenigs**.
- Freudenberg, E.**, and **P. György**, calcium fixation by animal tissues. IX., i, 242.
calcium fixation in the development of bone, i, 1129.
- Freudenberg, K.**, **L. Orthner**, and **H. Fikentscher**, tannins and similar substances. XV. A new degradation of catechin, i, 660.
- Freudenberg, K.**, and **L. Purrmann**, tannins and similar substances. XVI. Stereoisomeric catechins. IV., i, 868.
- Freudenberg, K.**, and **F. Rhino**, steric series. IV. Configuration of alanine, i, 1173.
- Freund, J.** See **J. H. Northrop**.
- Freundler, P.**, on the determinable iodine of *Laminaria flexicaulis*, i, 354.
variation of the iodine in *Laminaria flexicaulis* at the period of the annual shooting, i, 811.
- Freundlich, E.**, and **E. Hochheim**, origin of the so-called cyanogen band, ii, 711.
- Freundlich, H.**, and **H. Baerwind**, some properties of osmium dioxide sol, ii, 120.
- Freundlich, H.**, and **E. J. Cuy**, derivatives and reactions of iron pentacarbonyl, ii, 188.
- Freundlich, H.**, and **F. Ishiwara**, pyrrole-red sols, ii, 739.
- Freundlich, H.**, and **L. F. Loeb**, possibility of a connexion between the protective and elastic properties of hydrophilic sols, ii, 533.
- Frey, F.**, detection of phosphoric acid with benzidine, ii, 424.
- Frey, M.** See **E. Fromm**.

- Frey, W. von**, serum proteins (method of obtaining serum and criticism of Rohrer's method of determining the albumin-globulin value), i, 1123.
- Frick, F.** See **R. Stoermer**.
- Fricke, R.**, purification of malt diastase by electro-dialysis and electro-osmosis. II., i, 799.
- Fricke, R.** [with **H. Kleebeck**, and **E. Frieling**], theory of the Liesegang "rhythmic" precipitation, ii, 26.
- Fricke, R.**, and **T. Ahrndts**, ageing of zinc hydroxide and alkali zincates, ii, 681.
- Fricke, R.**, and **W. Blencke**, growth of freely suspended gas bubbles in solutions saturated with the same gas, ii, 22.
- Fricke, R.**, and **P. Kaja**, purification of ferments by electro-dialysis and electro-osmosis. I. Malt diastase, i, 469.
non-homogeneity and other properties of malt diastase, i, 470.
- Fricke, R.**, and **H. Schützdeller**, hydrates in aqueous solution. II. Citrate, *d*-tartrate, acetate, and oxalate ions, i, 1031.
hydrates in aqueous solution. I. The beryllium ion, ii, 180.
- Fricke, R.**, and **F. Wever**, X-ray examination of aged metallic hydroxides, ii, 616.
- Fricke, R.**, and **O. Windhausen**, the ageing of chromium hydroxide; alkali chromites and their solutions, ii, 191.
- Friedel, G.**, and **G. Ribaud**, transformation of the diamond, ii, 474.
- Friedel, R. K.** See **L. A. Congdon**.
- Friedemann, T. E.** See **P. A. Shaffer**.
- Frieden, A.** See **A. W. Thomas**.
- Friedländer, P.**, and **L. Sander**, fission of indigoid dyes by alkalis, i, 662.
indigoid dyes, i, 663.
- Friedmann, L.** See **B. M. Margosches**.
- Friedrich, F.** See **A. Lottermoser**.
- Friedrich, H.** See **W. Biltz**.
- Friedrich, W.**, and **M. Bender**, scattering of Röntgen rays, ii, 370.
- Frieling, E.** See **R. Fricke**.
- Friend, H.**, a quantitative colour reaction given by adrenaline and urine, ii, 75.
- Friend, J. N.**, **D. W. Hammond**, and **G. W. Trobridge**, influence of emulsoids on the rate of solution of iron, ii, 742.
- Fries, H. S.**, and **N. Knight**, substances dissolved in rain and snow, ii, 751.
- Fries, K.**, and **H. Engel**, reaction processes underlying substitution, i, 1187.
- Fries, K.**, and **E. Köhler** [with **G. Schürmann**], quinones of linear ring systems with reactive halogen in the non-quinonoid nucleus, i, 525.
- Friesse, H.** See **H. Scheibler**.
- Fritts, E. C.**, determination of dielectric constants of gases by high-frequency method, ii, 292.
- Fritzmann, E.**, electrical conductivity of complex compounds of platinum and palladium with organic mono-selenides. III., i, 935.
complex compounds of palladium with organic selenides. II., i, 936.
- Fritzsche, A.** See **W. Borsche**, and **A. Sieverts**.
- Fröhlich, R.** See **H. Staub**.
- Frömel, W.** See **J. J. P. Valetton**.
- Frohlich, P. K.**, amphoteric character of gelatin and its bearing on certain electrochemical phenomena, ii, 728.
- Froidevaux, J.**, determination of ammoniacal nitrogen in certain nitrogenous materials and particularly in proteins and products of proteolysis, ii, 57.
- Fromageot, C.**, relations between the physico-chemical state and the functioning of protoplasm; photosynthesis and respiration, i, 697.
- Fromm, E.**, **L. Brück**, **R. Runkel**, and **E. Mayer**, scission of disulphides; synthesis of triazoles, i, 672.
- Fromm, E.**, and **R. Ebert**, derivatives of 2:6-dinitrophenol, i, 1059.
- Fromm, E.**, and **P. Jokl**, derivatives of mono- and di-substituted hydrazo-dithiocarbonamides, i, 882.
- Fromm, E.**, and **H. Landmann**, derivatives of dithioethylene and dithioacetylene, i, 39.
- Fromm, E.**, and **M. Soffner**, isomerism of thioaldehydes, i, 492.
- Fromm, E.**, **M. Soffner**, and **M. Frey**, action of acid chlorides on semicarbazides, i, 93.
- Fromm, E.**, and **B. Ungar**, derivatives of thiodiglycol, diethylene disulphide, and thioxan, i, 68.
- Frouin, A.**, effect of iron and zinc on the development of *Aspergillus niger* in the presence of dextrose, i, 803.
- Frumkin, A.**, forces at phase boundaries and the adsorption at the surface of separation between air and a solution of an inorganic electrolyte, ii, 462.
- Frumkin, A.**, and **R. Kulvarskaja**, partition of silver nitrate between water and aniline, ii, 757.

- Fry, H. S., E. L. Schulze, and H. Weitkamp**, liberation of hydrogen from carbon compounds. I. Interaction of acetylene, methyl alcohol, and formaldehyde with fused alkali hydroxides, i, 1277.
- Fry, H. S.** See also **C. E. Otto**.
- Fry, W. H.** See **P. L. Gile**.
- Fuchs, C.** See **H. P. Kaufmann**.
- Fuchs, K.**, micro-electrolytic determination of gold, ii, 207.
- Fuchs, K., and E. Katscher**, reaction between α -trioxymethylene and sulphuryl chloride, i, 1164.
- Fuchs, W., and B. Elsner**, tautomerism of phenols. VI. Pyrogallol and hydroxyquinol, i, 960.
- Fühner, H.**, aqueous solubilities in homologous series, ii, 303.
- Fürth, A.** See **E. Abel**.
- Fürth, O.**, determination of the tyrosine content of proteins. II., ii, 575.
- Fürth, O., and Z. Dische**, determination of tryptophan in proteins, ii, 576.
- Fürth, R.**, production of metal sols, ii, 533.
- Fürth, R., and O. Blüh**, physical properties of mixtures of alcohol and serum, ii, 313.
- dielectric constant of vanadium pentoxide sol, ii, 729.
- Fues, E.**, spectroscopic confirmation with caesium of Bohr's distribution numbers, ii, 213.
- Fujimaki, Y.**, action of intravenous infusions of sodium chloride and sugar on the alkali reserve of the blood, i, 1125.
- Fujise, S.** See **K. Yoshimura**.
- Fukuda, M.** See **T. Takamine**.
- Fulcher, G. S.**, band lines in the secondary spectrum of hydrogen, ii, 802.
- Fullerton, B.** See **F. W. Heyl**.
- Fulmer, E. I., W. W. Duecker, and V. E. Nelson**, multiple nature of bios, i, 695.
- Fulmer, E. I., and V. E. Nelson**, yeast. V. Is bios a single substance? i, 695.
- Fulmer, E. I., V. E. Nelson, and A. White**, growth of yeast on a medium of wholly synthetic origin, i, 126.
- Funk, C., and L. Freedman**, adrenaline compounds, i, 508.
- Funk, H.**, action of nitrogen on silicon obtained from cooled molten aluminium, ii, 473.
- Funke, E.** See **R. Meyer**.
- Furrer, E.** See **E. Bosshard**.
- Fuss, V.**, constitution of ternary aluminium alloys, ii, 263.
- G.**
- Gabriel, S., L. Kornfeld, and C. Grunert**, unsaturated lactones, i, 399.
- Gabriel, S., and R. Wolter**, certain cyclic and fatty-aromatic bases from di-o-nitrobenzyl-acetoacetic and -malonic esters, i, 177.
- Gadamer, J.**, influence of phylogeny on the constitution of the alkaloids, i, 597.
- Gadamer, J.** [with **H. Dieterle, (Frl.) A. Stichel, M. Theyssen, and K. Winterfeld**], chelidonium alkaloids. III., i, 1227.
- Gädke, W.** See **O. Diels**.
- Gaertner, K.** See **Wilhelm Schneider**.
- Gaertner, P.** See **H. P. Kaufmann**.
- Gaffron, H.** See **W. Traube**.
- Gage, R. B.** See **W. F. Foshag**.
- Gagliardo, E.** See **U. Sborgi**.
- Gaglio, G.**, vitamins. I. Antineuritic vitamins, i, 454.
- Gagos, K.** See **A. F. O. Germann**.
- Gainey, P. L.** See **C. O. Swanson**.
- Gairns, S.** See **F. G. Banting**.
- Gale, H. G.**, line and band spectra of fluorine, ii, 803.
- Gale, H. G., and G. S. Monk**, spectrum of fluorine, ii, 578.
- Gale, W. A.** See **E. H. Archibald**.
- Gall, H.** See **W. Manchot**.
- Gallagher, P. H.**, mechanism of oxidation in the plant. II. Substances capable of behaving as peroxydases, i, 595.
- mechanism of oxidation in the plant. III. Peroxydase; thermostability of the peroxydase of the mangold, i, 595.
- Gallaher, W. U.** See **A. M. Buswell**.
- Gallia, H.** See **S. Fränkel**.
- Gallichi, E.** See **U. Sborgi**.
- Gallotti, M.** See **G. Charrier**.
- Gamble, J. L., G. S. Ross, and F. F. Tisdall**, metabolism of fixed base during fasting, i, 115.
- Ganesan, A. S.** See **C. V. Raman**.
- Gangl, J.** See **E. Späth**.
- Ganguly, P. B.** See **K. C. Sen**.
- Gans, R.**, calcium content of normal and diseased skin, i, 1129.
- Gans, R.**, how are metals attacked by acids? ii, 480.
- García Banús, A., and L. Medrano**, organomagnesium derivatives. III., i, 180.
- García Banús, A., and J. Pascual Vila**, the constitutional formula of benzylbenzoin, i, 1208.
- Gardent, L.** See **A. Sanfourche**.
- Gardner, G. H.** See **P. D. Lamson**.

- Gardner, J. A.**, cholesterol content of the bile, blood, and flesh of the hippopotamus, i, 1371.
- Gardner, J. A.** See also **F. W. Fox**.
- Gardner, J. H.**, and **R. Adams**, trihydroxymethylanthraquinones. II., i, 299.
- Gardner, R.**, essential oil of manuka (*Leptospermum scoparium*), i, 596.
- Garelli, F.**, formation of sulphides, selenides, and tellurides of certain metals. I. Copper compounds, ii, 47.
- Garino, M.**, and **A. D'Ambrosio**, dichloropinane and its derivatives, i, 973.
- Garino, M.**, and **M. Raffaghello**, action of phosphoryl chloride on metallic hydroxides, ii, 610.
- Garmendia, T.** See **O. Fernández**.
- Garner, C. P.** See **F. E. Francis**.
- Garner, W. E.**, and **F. C. Randall**, rhythmic crystallisation of undecolic acid, ii, 239.
- alternation in the heats of crystallisation of the normal monobasic fatty acids. I., ii, 385.
- Garner, W. E.**, and **S. W. Saunders**, explosion of acetylene and nitrogen. III. Effect of the addition of oxygen on the production of hydrocyanic acid, i, 1026.
- Garner, W. E.** See also **E. A. Blench**.
- Garner, W. W.**, **C. W. Bacon**, and **H. A. Allard**, photoperiodism in relation to hydrogen-ion concentration of the cell sap and the carbohydrate content of the plant, i, 699.
- Garola, (Mlle.) J.**, determination of phosphorus in organic materials, ii, 58.
- Garrison, A.**, photochemical properties of cuprous oxide, ii, 339.
- behaviour of silver iodide in the photovoltaic cell, ii, 401.
- Garton, F. L.** See **F. D. Chattaway**.
- Gascard, A.**, and **G. Damoy**, the acids in beeswax, i, 8.
- alcohols and hydrocarbons from beeswax, i, 133.
- Gasparini, G.** See **N. Tarugi**.
- Gastaldi, C.**, reduction of pyruvylhydroxamic acid phenylhydrazane. V., i, 717.
- derivatives of pyruvylhydroxamic acid. VI., i, 717.
- action of sodium hydrogen sulphite on chlorides of the hydroxamic acids. VII., i, 733.
- synthesis of 1:2:4-triazole compounds. VIII. Benzoylformhydroxamic acid and its derivatives, i, 1116.
- Gastaldi, C.**, action of nitroxyl on α -ketoaldehydes. IX. Preparation of α -ketoformhydroxamic acids, i, 1208.
- Gatewood, E. S.**, action of alkali on substituted uric acids. I. 9-Phenyl-1:3-dimethyluric acid, i, 218.
- Gatti, U.** See **C. Porlezza**.
- Gaubert, P.**, optical properties of graphite and graphitic oxide, ii, 40.
- orientation of ammonium iodide crystals by cleavage planes of micas, ii, 549.
- Gauger, A. W.**, critical potentials of hydrogen in the presence of nickel catalyst, ii, 290.
- Gault, H.**, and **Y. Altchidjian**, pyrogenic dissociation of hexadecene, i, 1025.
- Gault, H.**, and **R. Guillemet**, chlorination of carbon chains; chlorination of normal butyl alcohol, i, 256.
- Gault, H.**, and **F. A. Hessel**, pyrogenic dissociation of hexadecane, i, 1025.
- Gault, H.**, **F. A. Hessel**, and **Y. Altchidjian**, pyrogenic decomposition of acyclic hydrocarbons, i, 701.
- Gault, H.**, and **H. Klees**, condensation of acetoacetic esters with malonic esters, i, 1284.
- Gault, H.**, and **B. C. Mukerji**, hydrocellulose, i, 1048.
- determination of the copper number of cellulose materials; the Fontès-Thivolle molybdomanganometric method, ii, 280.
- Gault, H.**, and **R. Truffaut**, chlorination of chloroform, i, 1278.
- Gault, H.**, and **(Mlle.) M. Urban**, soluble cellulose esters of higher ethylenic fatty acids, i, 1047.
- Gaumé, J.** See **O. Bailly**.
- Gaviola, E.**, and **P. Pringsheim**, influence of concentration on polarisation of fluorescent light, ii, 442.
- polarisation of sodium resonance radiation in magnetic fields, ii, 715.
- Gawalowski, A.**, the hydrocarbon $C_{10}H_{16}$ and its isomerides, i, 64.
- substitutes for platinum, ii, 866.
- Gawda, R. N.**, oxidation of ammonia and nitrites by micro-organisms under different conditions, i, 818.
- Gay, L.**, **P. Mion**, and **Servigne**, dehydration of alcohol; the system, water-alcohol-hydrocarbon-potassium carbonate; equilibrium between the three liquid phases, i, 1029.
- Geake, A.**, [determination of the] phosphorus content of cotton, ii, 348.
- Geddes, A. E. M.**, Balmer series of hydrogen, ii, 436.

- Gehe & Co., Akt.-Ges., and H. Runne**, ester of cholic acid, i, 1071.
 derivatives of hexamethylenetetramine, i, 1312.
- Geiger, H., and A. Werner**, number of α -particles expelled by radium. I. Counting of scintillations, ii, 226.
- Geiger, P. H.**, spectro-photo-electrical effects in argentite, ii, 82.
- Geiling, E. M. K.** See *J. J. Abel*.
- Geiling, H.** See *C. Schweitzer*.
- Geiss, W., and J. A. M. van Liempt**, explanation of cold-working on the basis of electrical measurements, ii, 475.
 diffusion in solid metals, ii, 723.
- Gelissen, H., and J. D. van Roon**, furoyl peroxide, i, 759.
- Gelissen, H.** See also *J. Böeseken*.
- Geloso, M.**, adsorption of iron by manganese dioxide; equilibrium displacement, ii, 413.
- General Electric Co., Ltd., London, Research Staff**, photoelectric and selenium cells, ii, 377.
 disappearance of gas in the electric discharge, ii, 808.
 deformation of tungsten single crystals under tensile stress, ii, 818.
- Geoffroy, R.** See *C. Courtot*.
- George, H., and E. Bayle**, spectro-photometric definition of the colour of fluorescence, ii, 583.
- George, H. J.** See *G. M. Dyson*.
- George, R. H., and K. A. Oplinger**, effect of the silent electric discharge on gases, ii, 715.
- Gérard, L.** See *H. Meerwein*.
- Gerasimović, B.**, cosmic clouds of calcium and sodium, ii, 335.
- Gerke, R. H.**, free energy of mercurides, ii, 18.
 chemical affinity and electron affinity, ii, 448.
- Gerlach, W.**, the spectrum of iodine, and the band spectrum of mercury, ii, 77.
 structure of "black diamonds" [carbonado], ii, 753.
- Gerlach, W., and O. Brezina**, direct determination of the relative intensities of [the components of] multiple [spectral] lines, ii, 283.
- Gerlach, W., and A. C. Cilliers**, magnetic moments of atoms, ii, 717.
- Gerloff, W.** See *R. Meyer*.
- Germann, A. F. O.**, reactions in carbonyl chloride solutions. I., ii, 674.
- Germann, A. F. O., and K. Gagos**, reactions in carbonyl chloride solutions. II. Formation of chloroaluminates, ii, 861.
- Germann, F. E. E.**, emanation method for radium, ii, 587.
- Germann, F. E. E., and M. C. Hylan**, photographic sensitiveness of silver iodide, ii, 9.
 dispersity of silver halides in relation to their photographic behaviour, ii, 409.
- Gerngross, O., and S. Bach**, the isoelectric point of gelatin from hide and bone, i, 231.
 the displacement of the isoelectric point of gelatin by formaldehyde, i, 231.
- Gerngross, O., and M. Dunkel**, a para-linking of the benzene ring; extension of the Gattermann diphenyl synthesis and quinquephenyl [didiphenyl]benzene, a straight chain of five benzene nuclei, i, 720.
 melting-point determination, ii, 621.
- Gerngross, O., L. Schachnow, and R. Jonas**, course of reaction in the Gattermann synthesis of diphenyl and the formation of para-chains of benzene rings, i, 719.
- Gerngross, O., and E. Zühlke [with J. Rothe, and J. Jodé]**, simple synthesis of the salts of *N*-benzylideneaminoacids, i, 1191.
- Gero, W. B.** See *P. Hidnert*.
- Gerö, M.** See *C. Gränacher*.
- Gerretsen, F. C.** See *R. M. Barnette*.
- Geradorff, C. E. F.** See *D. B. Jones*.
- Gerwig, W.** See *M. Trautz*.
- Gessard, C.**, odour of cultures of *Bacillus pyocyaneus*, i, 1013.
- Gessner, H.**, ageing phenomena in vanadium pentoxide sols, ii, 741.
- Getman, F. H.**, electrolytic dissociation of some salts in furfuraldehyde, ii, 305.
 ultra-violet absorption spectrum of furfuraldehyde, ii, 367.
- Gheorghiu, C. V.**, effect of silver nitrate and alkali nitrates on aromatic anhydrides, i, 170.
 acetyl derivative of deoxybenzoin (tautomeric form), i, 183.
- Ghigliotto, C.**, reduction of sodium nitrate and potassium chlorate during the putrefaction of viscera, i, 792.
 detection of small quantities of nitric acid in poisoning cases, ii, 57.
 the solubility of mercuric sulphide in ammonia and its influence on the tests for mercury and arsenic, ii, 62.
- Ghosh, J. C., and S. C. Biswas**, extinction coefficients of some acids and their salts in the ultra-violet, ii, 523.

- Ghosh, S.**, method for obtaining pure glucosides soluble in water from plants, i, 659.
- Ghosh, S.**, and **N. R. Dhar**, adsorption. VIII. Adsorption by freshly-precipitated barium sulphate during and after its preparation, ii, 733.
- Ghosh, S.** See also **N. R. Dhar**.
- Ghysels, M.**, formals of primary alcohols, i, 490.
- Giannini, G.**, action of weak bases on cellulose nitrate, i, 500.
- Giannini, G.** See also **A. Pieroni**.
- Gibbs, H. D.** See **B. Cohen**.
- Gibbs, W. E.**, and **W. Clayton**, production of large, clear, cubical crystals of sodium chloride, ii, 335.
- Gibson, C. S.**, and **D. C. Vining**, dimorphism of diphenylarsenious chloride (diphenylchloroarsine), i, 675.
- Gibson, D. T.** See **S. Smiles**.
- Gibson, K. S.**, spectral characteristics of test solutions used in heterochromatic photometry, ii, 807.
- Gibson, R. E.**, electrolysis of mixtures of acetates and trichloroacetates, i, 827.
- Gierisch, W.** See **H. Wislicenus**.
- Giese, O.** See **K. Kindler**.
- Giesecke, F.** See **E. Blanck**.
- Gieseler, H.**, arc spectrum of chromium, ii, 285.
- Gieseler, H.**, and **W. Grottrian**, absorption spectra of chromium and iron vapours, ii, 287.
- structure of the iron spectrum, ii, 578.
- absorption spectra of vanadium, titanium, and scandium, ii, 713.
- Giesler, M.** See **P. Karrer**.
- Giesy, P. M.** See **R. B. Smith**.
- Gieteling, H.** See **B. Sjollesma**.
- Gil, J. C.**, and **J. Beato**, stability of thiosulphuric acid in the presence of fuming hydrochloric acid; preparation of solutions of thiosulphuric acid, ii, 331.
- Gilchrist, H. S.** See (*Sir*) **J. C. Irvine**.
- Gilchrist, R.**, determination of iridium in platinum by the method of fusion with lead, ii, 126.
- Gile, P. L.**, methods of diagnosing [soil] toxicity, i, 928.
- Gile, P. L.**, **H. E. Middleton**, **W. O. Robinson**, **W. H. Fry**, and **M. S. Anderson**, determination of colloidal material in soils by adsorption, ii, 796.
- Gillet, A.**, multiple forms (pseudo-polymorphism) of derivatives of phenylethylene, $R'R''C:CR'''Ph$, i, 1207.
- Gillet, A.**, the protective action of anti-oxygenisers against the changes due to light on dyed fabrics, ii, 141.
- Gillet, A.** See also **C. Dufraisse**.
- Gillette, G. R.** See **L. H. Milligan**.
- Gillis, J.**, position of the point of pseudo-transition of dextrose: $S_{\text{aq}} \rightleftharpoons S_a + L$ (in internal equilibrium), i, 14.
- the system, maltose-water, i, 498.
- Gilman, H.**, studies concerning the direct preparation of organo-beryllium halides, i, 340.
- Gilman, H.**, and **C. R. Kinney**, mechanism of the reaction of isocyanates and isothiocyanates with the Grignard reagent, i, 382.
- Gilman, H.**, and **R. McCracken**, the yields of some Grignard reagents, i, 23.
- Gilmour, R.**, mutarotation of the sugars, i, 497.
- Ginsberg, H.** See **W. A. Roth**.
- Giordani, F.**, kinetics of the decomposition of sodium hypochlorite solutions, ii, 856.
- Girard, A.**, nitro-derivatives of *p*-aminophenol and *p*-aminophenoxy-acetic acid, i, 959.
- Girard, P.**, displacement of acids by diffusion, ii, 147.
- oxidations and reductions during passage through a septum; hypothesis of catalytic activation by a boundary, ii, 602.
- Girard, P.**, and **M. Platard**, mechanism of oxidation-reduction processes manifest in biochemical processes, ii, 396.
- oxidation-reduction mechanism without catalysts, ii, 397.
- Girardet, N. F.**, soluble enzymes of the bryony root (*Bryonia dioica*), i, 1269.
- Giron, J.**, action of chlorine on trimethylene trisulphide, i, 1280.
- Giron, J.** See also **M. Delépine**.
- Giua, M.**, certain nitroarylhydrazines, i, 338.
- thallous picolonate, i, 770.
- action of oxalyl chloride on certain cyclic organic bases, i, 1107.
- Giua, M.**, and **V. de Franciscis**, action of oxalyl chloride on naphthols, i, 1092.
- Gjaja, I.**, the consumption of oxygen in sea organisms when exposed to the atmospheric air, i, 111.
- Gjaja, I.**, and **B. Maleš**, energetic metabolism in mouse and rat, i, 115.
- Gjaja, I.** See also **I. Asheshov**.
- Gladkorn, W.** See **H. Leuchs**.
- Glasenapp, M. von**, the energy of crystallisation of ignited gypsum, ii, 178.

- Glaser, E., and H. Krauter**, saponins of *Polygala amara*, i, 1215.
- Glaser, E., and W. Wulwek**, new synthetic nitrophenol glucosides and the disinfectant action and toxicity of the nitrophenols, i, 797.
- Glaser, O.**, copper, enzymes, and fertilisation, i, 1141.
- Glasstone, S.**, intermittent current electrolysis. III. The measurement of overvoltage, ii, 151.
cathodic behaviour of alloys. I. Iron-nickel alloys, ii, 528.
measurement and cause of overvoltage, ii, 600.
- Glichitch, L. S.**, the essential oil of *Ocimum viride* (Willd.) from Grasse and from New Caledonia; characterisation of α - and γ -terpinenes, i, 64.
essence of the carnation, i, 700.
action of formic acid on phenols and propenyl phenolic ethers, i, 1306.
- Glocker, R.**, application of X-rays to quantitative chemical analysis, ii, 121.
- Glocker, R., and E. Kaupp**, "fibre" structure of electrolytically prepared metals, ii, 518.
observations of the course of recrystallisation [of silver] by means of X-rays, ii, 857.
- Glockler, G.**, behaviour of low-velocity electrons in methane, ii, 374.
- Glover, T.** See *G. T. Morgan*.
- Glud, W., and G. Schneider**, acceleration of the reaction between ethylene and sulphuric acid, i, 359.
- Glud, W., and K. Schönfelder**, nickel sulphide. II., ii, 414.
- Gmelin, W.** See *J. von Braun*.
- Goard, A. K., and E. K. Rideal**, catalytic and induced reactions; (i) in the presence of salts of cerium; (ii) in the presence of salts of iron, ii, 160.
measurement of certain "inaccessible" potentials with a controlled oxygen electrode, ii, 598.
- Goby, J.** See *P. Langlais*.
- Godchot, M.**, syntheses of dibasic acids derived from ethers, i, 48.
- Godchot, M., and P. Bedos**, preparation of stereoisomerides in the disubstituted cyclohexanol series, i, 635.
- Godden, W.** See *M. B. Richards*.
- Goebel, F.** See *F. von Bemuth*.
- Goebel, W.** See *O. Ruff*.
- Goebel, W. F.**, the catalytic bromination of aliphatic acid chlorides, i, 138.
- Goebel, W. F., and W. A. Noyes**, derivatives of camphoronic acid, i, 290.
- Götz, I. D., and G. P. Pamfil**, diffusion in solutions of strong electrolytes, ii, 454.
- Goiffon, R., and F. Nepveux**, colorimetric determination of phenols in urine, ii, 706.
- Goiffon, R.** See also *P. Descomps*.
- Gokhale, S. K., J. J. Sudborough, and H. E. Watson**, conversion of eugenol into isoeugenol, i, 508.
- Goldblatt, H.**, experimental rickets in rats on a purified synthetic diet deficient in phosphorus and fat-soluble organic factor, i, 788.
- Goldenberg, A. von.** See *G. B. Bredig*.
- Golding, J.** See *S. S. Zilva*.
- Goldschmidt, H.**, vapour pressure of nitric oxide, ii, 105.
- Goldschmidt, H., and F. Aas**, conductivity of weak acids in methyl alcohol and alcoholysis of their aniline salts, ii, 825.
- Goldschmidt, H., and P. Dahll**, the equilibrium hydrogen-ion-methyl alcohol-water, ii, 235.
- Goldschmidt, H., and O. Neuss**, salts of isovaleric acid and α -bromoisovaleric acid with organic bases, i, 827.
- Goldschmidt, S.** [with *A. Wolf, I. Drimmer, R. Wagner, E. Wolfhardt, and S. Nathan*], amine oxidation. IX. Hydrazyls, i, 884.
- Goldschmidt, S., and F. Christmann**, quinuhydrone salts, i, 654.
- Goldschmidt, S., and C. Steigerwald**, univalent oxygen. III. 9-Chloro-10-phenanthroxyl, i, 1062.
- Goldschmidt, S., and V. Voeth**, amine oxidation. VIII. Oxidation of aliphatic amines, i, 337.
- Goldstück, M.**, 2:4-dinitrosoresorcinol as a delicate reagent for ferrous salts, ii, 703.
- Goldwasser, M.**, determination of colloidal substances in urine, ii, 431.
- Golla, H.** See *O. Ruff*.
- Goltz, H. L.** See *C. F. Cori*.
- Gomberg, M., and W. E. Bachmann**, synthesis of diaryl compounds by means of the diazo-reaction, i, 1295.
- Gompel, M., A. Mayer, and R. Wurmser**, ease of oxidation of organic substances at the ordinary temperature, i, 605.
- Gonell, H. W.**, X-ray spectrum of cellulose, ii, 588.
- Gonell, H. W., and H. Mark**, Röntgenographic determination of the structural formula of hexamethylenetetramine, i, 150.
- Goodall, F. L., and A. G. Perkin**, reduction products of the hydroxy-anthraquinones. V., i, 527.

- Goodchild, J. H.**, sodium cycle and modern geo-chemical problems, ii, 693.
- Goodenough, G. A.**, and **G. T. Felbeck**, maximum temperatures and pressures attainable in the combustion of gaseous and liquid fuels, ii, 397.
- Gooderham, W. J.**, combined fractionating column and condenser, ii, 846.
- Goodwin, H. W.**, and **R. Robison**, possible significance of hexosephosphoric esters in ossification. IV. Phosphoric esters of the blood, i, 1365.
- Gordon, H.** See **K. Jellinek**.
- Gordon, J.**, cystine in bacterial metabolism, i, 1015.
- Gordon, J.** See also **J. W. McLeod**.
- Gordon, N. E.**, gels and theory of adsorption, ii, 536.
- Gordon, S. G.**, composition of thomsonite, ii, 868.
- Gorgas, A.** See **H. Pringsheim**.
- Goris, A.**, chemical composition of the clandestine, i, 815.
chemical composition of the green fruit of vanilla and mode of formation of the perfume of vanilla, i, 1019.
- Goris, J. E.**, catalytic decomposition of ethyl alcohol in the presence of alumina, i, 703.
- Górski, M.**, determination of potassium in potassium salts, ii, 60.
- Gortner, R. A.**, origin of the humin formed during the acid hydrolysis of proteins, i, 1361.
- Gortner, R. A.**, and **W. F. Hoffman**, determination of the moisture content of expressed plant-tissue fluids, ii, 271.
- Gortner, R. A.** See also **G. O. Burr**, **R. Newton**, and **N. C. Pervier**.
- Gorton, A. F.** See **H. A. Schwartz**.
- Goss, F. R.**, **C. K. Ingold**, and **J. F. Thorpe**, glutaconic acids. XVI. Three-carbon tautomerism in the cyclopropane series. III. Refractometric evidence, i, 1164.
- Gossel, R.** See **J. von Braun**.
- Gossmann, O.**, emission of positive ions by heated salts, ii, 292.
- Goth, E.** See **W. Hüchel**.
- Goto, K.** See **E. Abderhalden**.
- Gottlieb, E.** See **V. Henriques**.
- Gottlieb, R.** See **R. Willstätter**.
- Gotts, R. A.**, and **L. Hunter**, preparation and reactions of the dihalogenodinitromethanes, i, 361.
- Gottschalk, A.**, animal carboxylase, i, 920.
- Gottschalk, A.** See also **C. Neuberg**.
- Goudet, H.**, and **H. Paillard**, special examples of Grignard's reaction, i, 1055.
- Goudsmit, S.**, spectrum of manganese, ii, 214.
spectrum of iron, ii, 364.
- Goudsmit, S.**, and **P. Zeeman**, magnetic resolution of the scandium lines, ii, 709.
- Gough, A.**, nature of the red blood-corpuscle, i, 583.
- Govaerts, P. A.**, and **P. M. Wenmaekers**, electrolytic deposition of zinc, iron, or nickel, ii, 681.
- Grabfield, G. P.**, **B. J. Alpers**, and **A. M. Prentiss**, effects of iodides on nitrogen metabolism, i, 451.
- Graef, H. de.** See **G. Chavanne**.
- Gränacher, C.**, **M. Gerö**, and **V. Schelling**, use of rhodanine in organic syntheses. IV. Indole- and furylpyruvic acids, i, 765.
- Gränacher, C.**, **A. Mahal**, and **M. Gerö**, use of rhodanine in organic syntheses. V. Indole-2-carboxylic acid, i, 765.
- Gränacher, C.** See also **P. Karrer**.
- Graf, F.** See **H. Lecher**.
- Graham, M.** See **S. S. Zilva**.
- Graham, V.**, and **R. H. Carr**, chemical factors determining the quality of tobacco, i, 816.
- Graham, V. A.** See **J. B. Sumner**.
- Grainger, H. H.** See **E. de B. Barnett**.
- Graire, A.**, reaction of alkali hydrogen sulphites with mercuric chloride, ii, 564.
- Gram, H. C.**, cell volume and electrical conductivity of blood, i, 679.
chlorides of serum, blood, and corpuscles in pathological conditions, i, 1251.
- Gram, H. C.** See also **J. H. Austin**.
- Grammont, A.**, determination of metals contained in small quantities in natural phosphates, ii, 426.
- Grandadam, R.** See **L. Hackspill**.
- Grandière, J.**, thermal decomposition of allophanic esters, i, 625.
- Grandsire, H.** See **H. Colin**.
- Granier, J.**, conductance of electrolytes for very high frequencies, ii, 456.
- Grant, J.**, and **J. R. Partington**, concentration cells in methyl alcohol, ii, 150.
- Grant, N. S.** See **E. G. R. Ardagh**.
- Grant, R.**, experiments in diffusions; periodic precipitations and markings, ii, 729.
- Grant, R.** See also **A. R. Penfold**.
- Grassman, W.** See **R. Willstätter**.
- Grassow, F.**, wool fat, i, 1032.

- Grave, T. B.**, attempts to prepare 2-methoxy-1-methylpiperidine; hydrogenation of certain pyridine derivatives, i, 933.
- Graves, G. D.**, and **R. Adams**, trihydroxymethylanthraquinones. I, i, 298.
- Graves, R. C.** See **J. M. Looney**.
- Grayson, H. J.** See **O. L. Brady**.
- Grebenshchikov, E. V.** See **N. A. Pushin**.
- Green, A.**, action of thionyl chloride on hydroxyanthraquinones. I. Thionylalazarin, i, 1080.
- Green, H. H.**, and **I. Lonstein**, behaviour of bacteria towards the alkaloids, i, 798.
- Green, H. H.**, and **P. Kamerman**, protein phytotoxins, with special reference to the new "modeccin," i, 678.
- Green, M. M.**, heat of vaporisation, a function of temperature, ii, 300.
- Greenbank, G. R.**, and **G. E. Holm**, autoxidation of fats, i, 829.
- Greenbank, G. R.** See also **G. E. Holm**.
- Greene, C. H.**, **K. Sandiford**, and **H. Ross**, amino-acid content of the blood in normal and pathological conditions, i, 440.
- Greene, C. W.**, gases of the air-bladder of *Porichthys notatus*, i, 793.
- Greenwald, I.**, are guanidines present in the urines of parathyroidectomised dogs? i, 794.
chemical changes in blood of dogs after thyro-parathyroidectomy, i, 1365.
- Greenwald, I.**, and **J. Gross**, rubidium and caesium creatinine picrates, i, 719.
chemistry of Jaffé's reaction for creatinine; a red tautomeride of creatinine picrate, ii, 508.
- Greenwood, G.** See **H. B. Dixon**.
- Greer, W. N.** See **C. A. Kraus**.
- Greider, C. E.** See **L. C. Raiford**.
- Greig, J. W.** See **N. L. Bowen**.
- Grevenmeyer, C. F.** See **G. Tammann**.
- Grey, E. C.**, latent fermenting powers of bacteria. I-III., i, 694.
synthesis of starch from sugar by bacteria, i, 912.
the evaluation of the purity of various organic products by the dichromate method, ii, 208.
- Grey, F. T.**, preparation of colloidal gold for the Lange test, ii, 460.
- Griassnov, N.**, adsorption of protein degradation products by erythrocytes, i, 534.
- Griebel, C.**, solanine content of potatoes, i, 1273.
- Griebel, C.**, acetaldehyde, a normal constituent of the tannin-rich contents of the "inclusion" cells in the mesocarp of certain fruits, i, 1391.
ripening process of bananas, i, 1391.
microchemical detection of acetaldehyde in fruits, ii, 791.
- Griebel, K.** See **F. Laquer**.
- Griffith, F. R.**, effect of potassium on the acid metabolism of surviving skeletal and cardiac muscles of the frog, i, 1260.
- Griffith, R. H.**, nitration of *p*-bromoacetanilide, i, 631.
sulphonation of *m*-dinitrobenzene, i, 842.
- Griffith, R. O.**, and **L. Hunter**, alkaline reduction of the carbon tetrahalides and of potassium *aci*-nitroform, i, 361.
- Griffith, W. H.**, and **H. B. Lewis**, synthesis of hippuric acid in the animal organism. VI. The influence of the protein of the diet on the synthesis and rate of elimination of hippuric acid after the administration of benzoates, i, 121.
- Griffiths, E.** See **J. H. Awbery**.
- Grigaut, A.** See **A. Chauffard**.
- Grignard, V.**, and **R. Jenkins**, mixed organo-aluminium compounds; aluminium monoethyl di-iodide and aluminium diethyl iodide, i, 951.
- Grignard, V.**, and **R. Stratford**, catalytic decomposition of hexahydro-aromatic and saturated aliphatic hydrocarbons; the cracking of petroleum, i, 841.
- Griliches, L.** See **A. Palladin**.
- Grill, E.**, crystalline magnesite of Valle della Germanasca, ii, 494.
- Grim, R.** See **H. Meyer**.
- Grimbert, L.**, **M. Malmy**, and **G. Poirot**, solubility of iodine in chloroform, ii, 165.
- Grimbert, L.**, and **G. Poirot**, detection of urobilin in the duodenal fluid, ii, 508.
- Grimm, A.** See **W. Prandtl**.
- Grimm, F. V.**, and **W. A. Patrick**, dielectric constants of organic liquids at the boiling point, ii, 86.
- Grimm, H. G.**, mixed crystals, ii, 828.
- Grimm, H. G.**, and **K. F. Herzfeld**, chemical valency from the point of view of energy, ii, 102.
- Grindel, H.** See **F. Straus**.
- Grindley, G. C.** See **A. M. Tyndall**.
- Grindley, R.** See **L. G. Radcliffe**.
- Grinten, K. von der**, adsorption and cataphoresis, ii, 664.
- Grobel, P.** See **K. Brand**.

- Groebe, W.** See **K. Brand**.
- Grönvall, H.**, action of simple narcotics on succinodehydrogenase, i, 1148.
- Groll, J. T.**, influence of hydrogen-ion concentration on the action of certain amylases, i, 1383.
- Groot, J.**, behaviour of sugars in dilute alkaline solutions. I. Cause of the transformation of dextrose in dilute solutions of potassium hydroxide, i, 836.
formation of dyes on animal fibres by reaction of the material itself, i, 1244.
- Groot, W. de**, line fluorescence in certain fluor spar crystals and especially ultra-violet fluorescence rays, ii, 442.
- Grose, N. R.** See **H. C. Sherman**.
- Gross, E. G.** See **F. P. Underhill**.
- Gross, J.** See **I. Greenwald**.
- Gross, P.** See **Robert Schwarz**.
- Gross, R., G. Koref, and K. Moers**, etching of hollow metallic crystals, ii, 383.
- Gross, R. E.** See **A. Kossel**.
- Grossmann, P.**, tautomerism of ethyl acetoacetate and acetylacetone; absorption spectra of these and related compounds, i, 834.
- Groth, B.**, phenacyl mercaptan and related substances, i, 1321.
- Grottrian, W.** See **H. Gieseler**.
- Grube, G., and W. Rüdell**, formation of double salts in the solid state in the system, lithium chloride-calcium chloride, ii, 547.
- Gruber, C. M.**, pharmacology of benzyl alcohol and esters. I. Effect of benzyl alcohol, acetate, and benzoate (per os). II. (Intravenously), i, 911.
- Gruber, G.** See **S. Fränkel**.
- Grünbaum, A.** See **I. Snapper**.
- Grünberg, A.**, theory of indicators, ii, 866.
- Grünthal, O.** See **J. Tröger**.
- Grundmann, H.** See **G. Heller**.
- Grunert, C.** See **S. Gabriel**.
- Gudden, B.**, range of α -rays from U-I and U-II, and the validity of the Geiger-Nuttall relation, ii, 717.
- Gudden, B., and R. Pohl**, electrical conductivity associated with the excitation of, and emission of light from [various] phosphors, ii, 224.
- Gühring, E.** See **A. Gutbier**.
- Günther, F.** See **H. Staub**.
- Günther, P.** See **K. Bennewitz**.
- Günther-Schulze, A.**, [relation between] cathode drop of potential, ionisation potential, and atomic weight, ii, 87.
- Günther-Schulze, A.**, calculation of the normal cathode drop of potential in mixtures of gases, ii, 222.
normal potential gradient in the discharge through gases, ii, 290.
normal cathode fall, ii, 443.
normal cathode fall of the glow discharge, and the work of detaching electrons at cathodes composed of electrolytes, ii, 665.
- Guertler, W., and F. Menzel**, copper-nickel-lead and copper-iron-lead alloys. IX., ii, 260.
- Guha, P. C., and S. C. De**, preparation of thiocarbonylhydrazide; mono- and dithio-*p*-urazine, i, 948.
- Guha, S. K.** See **A. C. Sircar**.
- Guilbert, C.** See **P. Lemay, and A. Maubert**.
- Guillaumin, A. J. A.**, action of hydroxylamine on ethyl tartrate, i, 1050.
- Guillaumin, C. O.**, acidity of urine measured by physico-chemical methods, i, 590.
- Guillemet, R.** See **H. Gault, and M. Nicloux**.
- Guitonnean, G.**, production of carbamide during ammonification by the *Microsiphonæ*, i, 807.
- Gulbransen, R.** See **C. H. Browning**.
- Gulevitsch, V.** [with **B. Semenowitsch, S. Kaplansky, and L. Bronde**], catalytic reduction of oximes in the presence of colloidal palladium, i, 1285.
- Gund, R.** See **T. Curtius**.
- Gunnaiya, D.** See **A. L. Narayan**.
- Gunnerson, F.** See **G. Borelius**.
- Guntz, A., and F. Benoit**, alkaline-earth sub-salts, ii, 610.
- Guntz, A. A.**, energy liberated in phosphorescence, ii, 643.
- Gupta, D. N.**, ether-soluble constituents of lac-resin, i, 1215.
- Gurley, R. K.** See **L. A. Congdon**.
- Gurlt, H.** See **E. Koenigs**.
- Garvitsch, L.**, heterogeneous catalysis, ii, 101.
activity of surface layers of fluids, ii, 529.
- Gustafson, R. K.** See **P. D. Lamson**.
- Gustavson, K. H.**, determination of the degree of complexity and complex formation in chromium salts, ii, 687.
- Gutbier, A.**, protective colloids. XIII. *Semen ceraloniæ siliquæ* as a protective colloid. II. Colloidal selenium, ii, 739.
- Gutbier, A.** [with **A. Fiecht**], colloidal selenium, ii, 104.
- Gutbier, A., and W. Hausmann**, the derivatives of hexachloroantimononic acid, i, 149.

- Gutbier, A., G. Kunze, and E. Gühring**, derivatives of hexachlorostannic acid, i, 150.
- Gutbier, A., and M. Müller**, chlorobismuthates, i, 149.
- Gutbier, A., and T. Payer**, sublimation apparatus, ii, 846.
- Guthe, A.** See *S. Bodforss*, and *O. Collenberg*.
- Gutlohn, L.** See *H. Bechhold*.
- Gutman, M.** See *T. F. Zucker*.
- Gutmann, A.**, noteworthy behaviour of organic sulphur compounds towards sodium arsenite, i, 134.
- Gutzeit, K.**, determination of albumins and globulins, ii, 795.
- Guye, C. E.**, surface actions and the law of distribution of molecular velocities, ii, 465.
- Gyemant, A.**, theory of ionic adsorption, ii, 391.
- György, P.**, the distribution of calcium and inorganic phosphorus in milk, i, 120.
- György, P.** See also *E. Freudenberg*.

H.

- Haar, A. W. van der**, saponins [of chestnut seeds], i, 128.
saponins and related compounds. X. Urson, i, 643.
- Haas, A. R. C.** See *H. S. Reed*.
- Haas, P., and T. G. Hill**, observations on certain reducing and oxidising reactions of milk, i, 349.
- Haas, P., and B. Lee**, reducing and oxidising reaction in milk, i, 908.
- Haas, P. and B. Russell-Wells**, on the significance of the ash content of certain marine algæ, i, 354.
- Haase, C.** See *W. Biltz*.
- Hackh, I. W. D.**, standardisation of nitrous oxide, ii, 779.
- Hackl, O.**, determination of arsenic, ii, 499.
precipitation of zinc sulphide from sulphate solutions, ii, 500.
- Hackspill, L., and G. D'Huart**, volumetric method of elementary analysis, ii, 625.
- Hackspill, L., and R. Grandadam**, pressure of saturated vapour of mixtures of potassium and sodium chlorides, ii, 854.
- Haden, R. L., and T. G. Orr**, effect of inorganic salts on the chemical changes in the blood of the dog after obstruction of the duodenum, i, 896.
- Haefler, W. T.** See *P. Karrer*.
- Haefely, P.** See *M. Battagay*.
- Hägglund, E., and C. B. Björkman**, lignin hydrochloride, i, 946.
- Hägglund, E., and E. O. Hedman**, formation of acetone from acetates, i, 492.
- Hägglund, E., and B. Sundroos**, alkoxyl groups of the wood and lignin of the pine, i, 837.
- Haehn, H., and H. Schweigart**, potato amylase, i, 233.
- Haehnel, O.**, solubility of calcium carbonate in water containing carbon dioxide under high pressures; properties of the solutions obtained, ii, 551.
solubility of strontium, barium, and heavy-metal carbonates in water under high pressure of carbon dioxide, and the properties of such solutions, ii, 758.
solubility of magnesium carbonate in water containing carbon dioxide under high pressure, and the properties of such magnesium carbonate solutions, ii, 759.
- Händel, M.**, acetonæmia, especially in avitaminosis, i, 445.
influence of salts on metabolism. II. Blood-sugar and liver glycogen, i, 899.
- Händler, A.** See *A. Reissert*.
- Häusler, H.**, gravimetric determinations with filter-tubes, ii, 774.
- Hagène, P.** See *R. Fosse*.
- Hagenow, C. F.** See *A. L. Hughes*.
- Hager, F. D.** See *C. S. Marvel*.
- Hagihara, J.**, the influence of colloids on enzymes. II. and III., i, 107, 472.
extractives of ox spleen, i, 903.
nuclein substance of the spleen, i, 903.
- Hahn, A., and L. Schäfer**, the transformation of creatine into creatinine, i, 345.
- Hahn, E.** See *J. von Braun*.
- Hahn, F. C., and E. E. Reid**, *o*-benzoylbenzoic acids containing fluorine, iodine, and sulphur, i, 965.
- Hahn, F. L., and E. Thielér**, aluminium amalgam, hydroxide, and oxide, ii, 412.
- Hahn, F. L., H. Wolf, and G. Jäger**, sensitive colour reaction for magnesium, ii, 784.
- Hahn, F. V. von**, colloid chemistry of night-blue, ii, 311.
influence of dissolved substances on the swelling of gelatin, ii, 833.
sensitive method for measuring swelling, ii, 834.

- Hahn, G.** See *J. von Braun*.
Hahn, O. transformation of atoms and researches on the chemical elements, ii, 379.
Haigh, L. D. See *W. S. Ritchie*.
Hainbach, O. See *J. von Braun*.
Hainsworth, W. See *S. Chapman*.
Hainsworth, W. R., H. J. Rowley, and D. A. MacInnes, effect of hydrogen pressure on the electromotive force of a hydrogen-calomel cell. II. Fugacity of hydrogen and hydrogen ion at pressures to 1000 atmospheres, ii, 742.
Hakomori, S. reactions of chromium, iron, and aluminium in the presence of tartaric acid and of glycerol, ii, 206.
Halban, H. von, and L. Ebert, optical absorption of dissolved salts, ii, 824.
 electrolytic dissociation of picric acid in aqueous solution, ii, 826.
Haldane, J. See *J. B. Shoesmith*.
Haldane, J. B. S., V. B. Wigglesworth, and C. E. Woodrow, effect of reaction changes upon human carbohydrate and oxygen metabolism, i, 444.
 effect of reaction changes on human inorganic metabolism, i, 451.
Haldane, J. B. S. See also *C. P. Stewart*.
Hall, L. See *C. Dorée*.
Hall, L. P. See *G. S. Forbes*.
Hall, R. E., densities and specific volumes of sodium chloride solutions, ii, 408.
Hall, W. W. See *G. E. K. Branch*.
Haller, A., action of tetrachloro- and tetrabromo-phthalic acids on turpentine; new method of preparing camphols and *d*- and *l*-camphor, i, 1084.
Haller, A., and E. Bauer, syntheses using sodamide. XII. Action of ethyl chloroformate on the sodium compounds of certain ketones, i, 830.
Haller, A., and R. Cornubert, *s*- and *as*-dimethylcyclopentanones, i, 1203.
Haller, A., and L. Palfray, constitution of and method of preparing hydroxyphenylhomocampholic acid, i, 854.
Haller, A., and (Mme.) P. Ramart, preparation of monoalkylpulegones, i, 1086.
Haller, A. See also *(Mme.) P. Ramart*.
Haller, E. See *K. Lindner*.
Haller, H. L., and D. F. J. Lynch, naphthalenedisulphonic acids. V. Determination of naphthalene-2:6- and -2:7-disulphonic acids, ii, 356.
Haller, H. L. See also *P. A. Levene*.
Haller, J. W. E., and A. G. Perkin, reduction products of the hydroxy-anthraquinones. IV., i, 300.
Haller, O. See *W. Madelung*.
Haller, R., adsorption compounds. IV., ii, 93.
Halversen, W. V., and W. B. Bollen, sulphur oxidation in Oregon soils, i, 818.
Hamackova, J. See *F. Schulz*.
Hamer, (Miss) F. M., synthesis of an azocyanine, i, 994.
Hamer, H. See *I. M. Kolthoff*.
Hamilton, C. S., arsinated *N*-arylamino-alcohols, i, 109.
Hamilton, T. S., and L. E. Card, utilisation of lactose by the chicken, i, 908.
Hamilton, T. S., and H. H. Mitchell, occurrence of lactase in the alimentary tract of the chicken, i, 908.
Hammarsten, E., biological significance of nucleic acid compounds, i, 456.
Hammersten, E., and H. Hammersten, osmotic pressure of certain electrolytes of high molecular weight, ii, 386.
Hammersten, H., electrolytes of high molecular weight and their significance in the cell, i, 1139.
Hammarsten, H. See also *E. Hammarsten*.
Hammerschmidt, W. See *A. Thiel*.
Hammett, F. S., creatine and creatinine in muscle extracts, i, 791.
Hammett, L. P., velocity of the hydrogen electrode reaction on platinum catalysts, ii, 162.
Hammond, D. W. See *J. N. Friend*.
Hamsik, A., potassium hydroxyhaemin, i, 571.
Hancock, J. S. See *A. F. Joseph*.
Handovsky, H., and E. du Bois-Reymond, reaction of alkaloids with gelatin [solutions] containing iodine, i, 232.
Handovsky, H., E. du Bois-Reymond, and C. M. von Strantz, action of chemical irritants on the vitality of protozoa, as measured by the rate of division, i, 1375.
Handovsky, H., and R. Zacharias, action of some compounds on the excitability of the nervus ischiadicus of the frog, i, 1375.
Hanke, M. T., and K. K. Koessler, proteinogenous amines. XVII. Faculty of normal intestinal bacteria to form toxic amines. XVIII. Production of hi-tamine, tyramine, and phenol in laboratory media by intestinal organisms. XIX. Factors involved in the production of phenol by the colon group. XX. Presence of histamine in the mammalian organism, i, 806.

- Hanke, M. T.** See also *K. K. Koessler*.
- Hann, R. M.**, polymorphic forms and thermotropic properties of Schiff's bases derived from 5-iodo-4-hydroxy-3-methoxybenzaldehyde, i, 404.
- Hannack, G.**, magnet steel with especial reference to the relation between the carbon content and magnetic properties, ii, 811.
- Hanot, M.**, width of the lines in the spark spectrum of hydrogen, ii, 283.
- Hansen, C. W.**, isoindigotin, i, 769.
- Hansen, H. M.**, and *S. Werner*, the optical spectrum of hafnium, ii, 79.
- Hansen, M.** See *G. Tammann*.
- Hansen, W.** See *A. Wahl*.
- Hansgird, F.** See *R. Scholl*.
- Hansman, F. S.** See *M. Martland*.
- Hantzsch, A.**, supposed syntheses from ethyl isatin-1-carboxylate, i, 420.
so-called auxochromes and their method of action, i, 638.
- Hanus, J.**, and *A. Jilek*, reduction of bismuth salts by hydrazine hydrate, and the titration of metallic bismuth, ii, 279.
- Hanzlik, P. J.** See *F. de Eds*.
- Hara, K.**, and *T. Sakamoto*, preparation of tropacocaine from Javanese coca leaves, i, 870.
- Hara, R.**, and *H. Shinozaki*, the vapour pressure of hydrocyanic acid, i, 152.
- Hara, S.**, the pharmacology of the rare earths. I. Cerium, i, 245.
- Harborne, R. S.** See *J. W. McBain*.
- Harden, A.**, and *S. S. Zilva* investigation of barley, malt, and beer for vitamins-B and -C, i, 1388.
- Hardikar, S. W.**, action of quinine on protein metabolism, respiratory exchange, and heat function. I. Protein metabolism, i, 1260.
- Harding, T. S.**, sources of the rare sugars. XI. Preparation of mannose. XII. Preparation of inulin, i, 141.
- Harding, V. J.**, and *B. A. Eagles*, creatine content of brain, i, 902.
- Hardy, F.**, extraction of pectin from the fruit rind of the lime (*Citrus medica acida*), i, 811.
- Hardy, R. K.** See *F. D. Chattaway*.
- Hare, A.**, polymorphic transformation energies, ii, 820.
- Harington, C. R.**, and *D. D. van Slyke*, determination of gases in blood and other solutions by vacuum extraction and manometric measurement. II, ii, 872.
- Harington, C. R.** See also *A. B. Hastings*.
- Harker, G.**, reactions at the interface of two immiscible liquids and the part played by the vapour of each; reaction between water and benzyl chloride, ii, 307.
- Harkins, H. H.**, and *H. L. Loechte*, symmetrical dicyclohexylhydrazine and related compounds, i, 435.
- Harkins, W. D.**, and *E. B. Keith*, oriented wedge theory of emulsions and the inversion of emulsions, ii, 730.
- Harkins, W. D.**, and *T. H. Liggett*, discovery and separation of the isotopes of chlorine and the whole number rule, ii, 142.
- Harkins, W. D.** See also *S. K. Allison*, and *S. J. Bircher*.
- Harmsma, A.** See *L. van Itallie*.
- Harper, H. J.**, determination of nitrates in soils; phenoldisulphonic acid method, ii, 274.
- Harpuder, K.**, solubility of uric acid. II, i, 1132.
determination of uric acid in blood-serum and tissue extracts, ii, 75.
- Harpuder, K.**, and *H. Erbsen*, solubility of uric acid. I, i, 1132.
- Harries, C.**, and *W. Nagel*, resinic nature of shellac; attempts to effect a partial synthesis, i, 975.
- Harris, J. A.**, *Z. W. Lawrence*, *W. F. Hoffman*, *J. V. Lawrence*, and *A. T. Valentine*, tissue fluids of Egyptian and upland cottons and their F_1 hybrid, i, 815.
- Harris, J. A.** See also *J. V. Lawrence*.
- Harris, L. J.**, titration of amino- and carboxyl-groups in amino-acids, etc. I-III. In aqueous solution, ii, 73.
the titration of amino- and carboxyl-groups in amino-acids, polypeptides, etc. IV-VI. Determinations in presence of formaldehyde and alcohol, ii, 355.
- Harris, R. E.**, pole-effects and pressure-shifts in the lines of the spectra of zinc and calcium, ii, 799.
- Harrison, A. P.** See *F. M. Scales*.
- Harrison, G. A.**, a simple automatic pipette, ii, 344.
- Harrison, T. R.**, and *P. D. Foote*, change in the thermoelectric power of tin at the m. p., ii, 866.
- Harrison, W. R.** See *E. P. Perman*.
- Harrop, G. A.**, and *E. M. Benedict*, inorganic substances in carbohydrate metabolism, i, 785.
- Hart, D.** See *L. J. Curtman*.
- Hart, L. R.**, and *S. Smiles*, derivatives of 3-oxy(1)thionaphthen, i, 664.

- Hart, M. C.**, and **F. W. Heyl**, cholesteryl palmitate, a constituent of the corpus luteum, i, 904.
- Hart, M. C.**, and **W. B. Payne**, 3-amino-4:4'-dihydroxyarsenobenzene, and its *N*-methylenesulphinat and *N*-methylenesulphonate derivatives, i, 888.
- 3-amino-4-hydroxyarsenophenyl-4'-glycine and its *N*-methylenesulphinat and *N*-methylenesulphonate derivatives, i, 888.
- Hart, P. C.**, action of sodium, potassium, and calcium ions and of uranyl nitrate on the spontaneous rhythmic movements of the muscular skin of the earthworm, i, 591.
- Hartley, H.** See **E. J. Bowen**.
- Hartman, W. W.** See **H. T. Clarke**.
- Hartmann, A.** See **E. Bamberger**.
- Hartmann, F.** See **K. A. Hofmann**.
- Hartmann, H.** See **O. Ruff**.
- Hartmann, H. U.**, behaviour of the lipoids of the blood immediately after fat ingestion in normal and diabetic cases with and without the administration of insulin, i, 782.
- Hartree, D. R.**, some approximate numerical applications of Bohr's theory of spectra, ii, 1.
- atomic structure and the reflection of X-rays by crystals, ii, 31.
- Hartree, W.**, and **A. V. Hill**, anaërobic processes involved in muscular activity, i, 240.
- Hartree, W.** See also **R. Azuma**.
- Hartshorn, E. B.** See **C. E. Bolser**, and **L. W. Jones**.
- Hartshorne, N. H.**, apparatus for the viscosimetric determination of transition points, ii, 846.
- Hartwell, G. A.**, mammary secretion. V. I. Further research on the threshold and effects of protein "excess." II. Quantitative relation of vitamin-B to protein, i, 1372.
- Harvey, A. W.**, and **G. Stegeman**, sulphonation of benzene, i, 1055.
- Harvey, E. H.**, efficiency of some organic dyes as anti-ferments, i, 1147.
- Harvey, M. T.** See **C. E. Davis**.
- Hasard.** See **E. Lesné**.
- Haselhoff, E.**, nitrogen economy of arable soil, i, 819.
- effect of fallow, dung, and green manures in conjunction with mineral manures, i, 819.
- Haselhoff, E.**, and **F. Haun**, ammonia and nitric acid content of the soil, i, 819.
- Haselhoff, E.**, and **O. Liehr**, biochemical conditions of a soil treated with different organic manures, i, 819.
- Haselhoff, E.**, and **O. Liehr**, carbon dioxide content of the soil atmosphere, i, 819.
- Hasenclever, P.** See **R. Scholl**.
- Haskins, C. A.** See **F. L. Babbott, jun.**
- Haslam, R. T.**, **G. Calingaert**, and **C. M. Taylor**, hydrates of calcium oxide, ii, 337.
- Hasler, A. W.** See **H. E. Fierz-David**.
- Hassel, O.**, behaviour of silver halides towards acid and basic dyes, ii, 738.
- Hassel, O.**, and **H. Mark**, crystal structure of bismuth, ii, 382.
- connexion between the [disposition of] the acetaldehyde molecule in the space lattices of acetaldehyde-ammonia and metacetaldehyde, ii, 651.
- crystal structure of graphite, ii, 721.
- structure of the isomorphous ammonium zirconium and ammonium hafnium fluorides, ii, 817.
- Hassel, O.** See also **K. Fajans**.
- Haselskog, S.**, iodide-iodate determinations, ii, 563.
- Hasseidreid, V.**, volumetric determination of [sulphur in] sodium sulphide, ii, 123.
- Hastings, A. B.**, and **J. Sendroy, jun.**, acidosis. XX. Colorimetric determination of blood pH at body temperature without buffer standards, ii, 869.
- Hastings, A. B.**, **J. Sendroy, jun.**, **C. D. Murray**, and **M. Heidelberger**, gas and electrolyte equilibria in the blood. VII. Effect of carbon monoxide on acidity of hæmoglobin, i, 1250.
- Hastings, A. B.**, **D. D. van Slyke**, **J. M. Neill**, **M. Heidelberger**, and **C. R. Harington**, gas and electrolyte equilibria in blood. VI. Acid properties of reduced and oxygenated hæmoglobin, i, 1008.
- Hastings, A. B.** See also **H. A. Salvesen**.
- Hatano, J.**, gelatin-sulphuric acid and casein-sulphuric acid, i, 677.
- Hatfield, W. D.**, soluble aluminium and the hæmatoxylin test in filtered waters, ii, 350.
- Hattori, Y.**, effect of α - and β -methylglucosides on taka-invertase, i, 1141.
- Hauffen, C.** See **C. L. Wagner**.
- Haugen, E. A.** See **W. Steinkopf**.
- Haun, F.** See **E. Haselhoff**.
- Haurowitz, F.**, blood pigments, i, 892.
- blood pigments. II. Chemical character of kathæmoglobin, i, 1122.
- blood pigments. III. Methæmoglobin and its derivatives, i, 1127.
- Hausen, J.** See **B. Helferich**.
- Hausmann, W.** See **A. Gutbier**.

- Hausser, J.** See *E. Briner*.
- Havelock, T. H.**, optical dispersion and selective refraction, with application to infra-red natural frequencies, ii, 441.
- Havlik, J.** See *L. Cikánek*.
- Hawkins, C. S. L.** See *N. J. Price*.
- Hawkins, J. A.**, acid-base equilibrium of the blood of normal guinea-pigs, rabbits, and rats, i, 1125.
- Haworth, R. D.**, and *A. Lapworth* [with *M. L. Wilson*], sulphonation of *m*-cresol and its methyl ether, i, 848.
- Haworth, R. D.**, *W. H. Perkin, jun.*, and *J. Rankine*, ψ -berberine, i, 1098.
- Haworth, R. D.** See also *J. S. Buck*.
- Haworth, W. N.** See *C. F. Allpress*, and *R. Campbell*.
- Hayashi, K.**, the adsorption of air by charcoals at low temperatures, ii, 172.
- Haymann, C.** See *G. Embden*.
- Hazama, F.**, pharmacology of cell respiration. V. Influence of γ -rays on cell respiration, i, 1122.
- Hazeldine, C. E.**, *F. L. Pyman*, and *J. Winchester*, tautomerism of amidines. IV. Methylation of 4(or 5)-nitro-glyoxaline and 4(or 5)-phenylglyoxaline, i, 1112.
- Hazleton, E. O.**, and *M. Nierenstein*, constitution of catechin. VI. Production of maclurin from acacatechin, i, 1218.
- Headdon, W. P.**, relation of composition, colour, and radiation to luminescence in calcites, ii, 561.
- Heaps, C. W.**, magnetostriiction of a magnetite crystal, ii, 587.
- Hebbel, K.** See *M. Trautz*.
- Heberlein, C.** See *E. Mond*.
- Hecht, G.**, determination of calcium in organic material by de Waard's method, ii, 124.
- Hecht, S.**, photochemistry of the visual purple, i, 1256.
- Heckscher, H.** See *H. I. Bing*.
- Hector, L. G.**, magnetic susceptibility of helium, neon, argon, and nitrogen, ii, 854.
- Hector, L. G.** See also *A. P. Wills*.
- Hedges, E. S.**, and *J. E. Myers*, periodic dissolution of metals in certain reagents, ii, 325.
- periodic catalytic decomposition of hydrogen peroxide, ii, 542.
- Hedman, E. O.** See *E. Hägglund*.
- Hedvall, J. A.**, and *J. Heuberger*, interchange of acids between solid phases, ii, 484.
- Heess, W.** See *W. Küster*.
- Heffer, A.**, modified Hempel pipette, ii, 344.
- Heide, K.** See *K. Brass*.
- Heidelberger, M.** See *A. B. Hastings*, and *K. Landsteiner*.
- Heidenreich, R.** See *K. von Auwers*.
- Heiduschka, A.**, and *J. Ripper*, application of the method of diffusion to the detection and separation of fatty acids, ii, 73.
- Heike, W.**, and *K. Ledebur*, ($\alpha + \gamma$) eutectoid in brass, ii, 859.
- Heilbron, I. M.**, and *T. A. Forster*, interaction of ethyl acetoacetate and *o*-hydroxydistyryl ketones, i, 1323.
- Heilbron, I. M.** See also *T. A. Forster*, and *A. McGookin*.
- Heilbrunn, L. V.**, colloid chemistry of protoplasm. III. Viscosity of protoplasm at various temperatures. IV. Heat of coagulation of protoplasm, i, 1378.
- Heilig, R.**, uranium diuresis, i, 796.
- Hein, F.**, and *O. Schwartzkopf*, organochromium compounds. IV. Chromium tetraphenyl hydroxide, i, 437.
- Hein, F.**, and *R. Spaete*, organochromium compounds. V. Chromium tolyl compounds, i, 889.
- Hein, W.** See *R. Dümpelmann*.
- Heindlhofer, K.**, crystal structure of hard steel, ii, 863.
- Heinemann, C. A.** See *M. Bredt-Savelsberg*.
- Heinz, H.** See *W. Fraenkel*.
- Heis, L.**, theory of the electron current in ionisation by collision, ii, 221.
- highly sensitive manometer, ii, 670.
- Heisenberg, W.**, theory of helium spectrum, ii, 577.
- Heisenberg, W.** See also *M. Born*, and *A. Landé*.
- Hekma, E.**, blood-clotting as an agglutination process, i, 236.
- Helderman, W. D.** See *E. Cohen*.
- Hele, T. S.**, sulphur metabolism of the dog. I. Synthesis of ethereal sulphate, i, 586.
- sulphur metabolism of the dog, II. Constancy of the relative output of ethereal sulphate and of neutral sulphur after oral administration of halogen-substituted benzenes, i, 899.
- Helfer, L.**, 2-hydroxy-5-methoxycyclohexylcarbinol, i, 1309.
- 6-methoxy-1:2:3:4-tetrahydroisocincholine, i, 1341.
- Helferich, B.**, and *E. Besler*, polymerisation of halogenated derivatives of ethylene oxide and of halogenated aldehydes, i, 1165.
- Helferich, B.**, and *J. Hausen*, preparation of acetals from aldehydes and ketones, i, 710.

- Helferich, B.**, and **L. Keiner**, preparation of higher ketones, i, 1166.
- Helferich, B.**, and **H. Koester**, triphenylmethyl ethers of cellulose and starch, i, 500.
- Helleberg, K.** See **H. von Euler**.
- Hellebrandt, M.** See **W. Herz**.
- Heller, G.**, dihydroquinoline bases, i, 768.
reduction product of *o*-nitromandelonitrile, i, 1195.
- Heller, G.** [with **H. Kretzschmann**, **H. Grundmann**, **H. Jürgens**, and **K. Müller-Bardoff**], isomerisation of nitroaldehydes by chemical means, i, 736.
- Hellgren, E. G.** See **E. Jorpes**.
- Hellriegel, E.** See **H. Leuchs**.
- Helmkamp, R. W.** See **E. P. Kohler**.
- Helmreich, E.**, and **R. Wagner**, indirect determination of carbonic acid and the respiratory quotient with the differential spirometer, ii, 425.
- Helwig, H.** See **K. Lindner**.
- Hempel, H.** See **A. Beythien**.
- Hempel, S.** See **F. Kehrmann**.
- Hemstreet, C.** See **W. L. Mallmann**.
- Hendel, J. M.**, potassium permanganate as a standard for iodometry, ii, 272.
copper as reducing agent in iron determinations, ii, 787.
- Henderson, G. G.**, and **D. Chisholm**, some oxidation products of β -pinene, i, 304.
- Henderson, G. G.**, and **C. A. Kerr**, the chlorohydrins of β -pinene, i, 303.
- Henderson, G. G.**, and **A. Robertson**, chemistry of cadinene. I., i, 1328.
- Henderson, G. G.**, and **J. M. Robertson**, oxidation of sabinene with chromyl chloride, i, 519.
- Henderson, G. H.**, preparation of line sources of radium-C, ii, 718.
- Henderson, L. J.**, **A. V. Bock**, **H. Field**, and **J. L. Stoddard**, blood as a psychomical system. II., i, 780.
- Henderson, W. E.** See **J. Cornog**.
- Hendricks, B. C.** See **H. G. Deming**.
- Hendrix, B. M.**, and **M. Bodansky**, relation of acidosis and hyperglycemia to the excretion of acids, bases, and sugar in uranium nephritis, i, 1259.
- Hendrix, B. M.**, and **J. P. Sanders**, effect of injections of sodium phosphates and sodium hippurate on the excretion of acid and ammonia by the kidney, i, 459.
- Hendry, J. L.** See **E. J. Cohn**.
- Henglein, F. A.**, and **H. Krüger**, measurements of the vapour pressures of nitric oxide, ii, 170.
- Hengstenburg, O.**, density of silicon-iron alloys and its relation to composition, ii, 616.
- Henke, C. O.**, and **O. W. Brown**, catalytic activity, ii, 162.
- Henke, C. O.** See also **O. W. Brown**.
- Hennichs, S.**, liver catalase, i, 697.
- Henning, F.**, and **W. Heuse**, determination of the boiling points of permanent gases, ii, 385.
calibration of the platinum resistance thermometer between 0° and -193°, ii, 403.
- Henraut, M.**, *s*-tribromobenzyl chloride and some of its transformations, i, 842.
- Henri, V.**, structure of molecules and absorption spectra of substances in the vapour state, ii, 4.
absorption of ultra-violet rays by acetaldehyde, ii, 513.
- Henri, V.**, and **H. de László**, ultra-violet absorption spectrum of naphthalene vapour; molecular activation and structure, ii, 367.
absorption spectrum of naphthalene vapour, ii, 513.
- Henri, V.** See also **A. Castille**.
- Henriques, V.**, and **E. Gottlieb**, ammonia content of blood, i, 1126.
- Henry, C.**, calculation of heats of formation and interpretation of some exceptions to the law of maximal work. ii, 537.
- Henry, T.** See **H. C. Brown**.
- Henry, T. A.**, and **T. M. Sharp**, mercuriation of nitrohydroxybenzaldehydes, i, 738.
- Henstock, H.**, bromine compounds of phenanthrene. II., i, 844.
explanation of the theory of the rotation of the atomic nucleus. V., VI. and VII., ii, 296, 517.
- Hentrich, W.** See **W. Wislicenus**.
- Heraeus, W.**, variations of the thermoelectric power of iron with its structure, ii, 377.
- Hérissey, H.**, and **J. Cheymol**, synthetic action of α -*D*-mannosidase in presence of some monohydric alcohols, i, 234, 713.
synthesising action of α -*D*-mannosidase in presence of ordinary glycol and glycerol, i, 801.
- Hérissey, H.**, and **R. Sibassié**, nature and amount of substances capable of hydrolysis by invertase and by emulsin contained in seeds of some Leguminosae, i, 812.
- Herman, C.**, structure of sodium chlorate and rock salt crystals, ii, 382.
- Hermann, H.**, local microchemical detection of alumina, ii, 570.

- Hermans, P. H.**, interconversion of some isomeric cyclic *cis*- and *trans*-1:2-glycols, i, 728.
- Hermans, P. H.** See also **J. Böeseken**.
- Hernández, S.** See **A. Madinaveitia**.
- Herrent, P.** See **W. Mund**.
- Herrera, L. A.**, imitation of nervous and cellular tissue by means of potassium hydroxide, silica, and alcohol, i, 1184.
- Herring, P. T.**, (*Sir*) **J. C. Irvine**, and **J. J. R. Macleod**, efficiency of various sugars and their derivatives in relieving the symptoms caused by insulin in mice, i, 1387.
- Herrmann, E.** See **R. Schwarz**.
- Herrmann, F.** See **E. Heuser**.
- Herrmann, J.** See **C. Feinberg**.
- Herrmann, R.** See **F. Mach**.
- Herroun, E. F.** See **E. Wilson**.
- Hertel, E.**, complex isomerism, i, 1179.
- Hertel, E.** See also **A. Benrath**.
- Hertz, G.**, excitation of spectral lines by electron impact. I., ii, 283.
- Hertz, J. J.**, and **M. Kahn**, cholesterol in duodenal contents, i, 114.
- Hertzman, A. B.**, and **H. C. Bradley**, autolysis. XI. Relation of the isoelectric point to digestibility, i, 1149.
- Herz, W.**, the "b" term of van der Waals's equation, ii, 20.
- surface tension, ii, 22.
- density and temperature. IV., ii, 524.
- further proof of the theorem of corresponding states, ii, 454.
- [relation between] internal friction (viscosity) and free space [of liquids], ii, 590.
- vibration frequencies of salts, ii, 651.
- Herz, W.**, and **M. Hellebrandt**, the solubility of lead chloride and lead bromide in aqueous solutions of the chlorides of the alkali and alkaline-earth metals, ii, 182.
- Herz, W.**, and **E. Martin**, internal friction of liquid systems, ii, 303.
- Herz, W.**, and **E. Neunkirch**, influence of strong acids on the solubility of oxalic acid, i, 368.
- Herz, W.** See also **R. Lorenz**.
- Herzberg, G.** See **H. Kautsky**.
- Herzfeld, E.**, determination of lipoids, ii, 796.
- Herzfeld, K. F.**, kinetic theory of Gibbs' principle on adsorption, ii, 22.
- Herzfeld, K. F.** See also **H. G. Grimm**.
- Herzner, R.** See **L. Moser**.
- Herzog, R. O.**, and **M. Kobel**, proteins. II. Determination of the molecular weight of silk fibroin, i, 1007.
- Herzog, R. O.**, and **E. Krahn**, proteins. I. Behaviour on solution in phenols, i, 1007.
- Herzog, R. O.**, and **G. Lundberg**, topographical reactions; esterification and mercerisation of cellulose, i, 373, 619.
- Heslinga, J.**, action of ammonia on organic halogen compounds at high temperature, i, 482.
- determination of chlorine, bromine, and iodine in organic compounds. II. Oxidation method, ii, 419.
- Heslinga, J.** See also **H. ter Meulen**.
- Hess, A. F.**, and **M. J. Matzner**, the inorganic phosphorus and calcium in maternal and foetal blood, i, 112.
- rickets in relation to the inorganic phosphate and calcium in maternal and foetal blood, i, 112.
- Hess, A. F.**, **G. C. Supplee**, and **B. Bellis**, copper as a constituent in woman and cow's milk; its absorption and excretion by the infant, i, 121.
- Hess, A. F.**, and **M. Weinstock**, catalytic action of minute amounts of copper in the destruction of antiscorbutic vitamin in milk, i, 1017.
- Hess, J. H.**, **J. K. Calvin**, **C. C. Wang**, and **A. Felcher**, calcium and phosphorus in the blood plasma in rickets and tetany, i, 112.
- Hess, K.**, **W. Weltzien**, and **E. Messmer** [with (*Frl.*) **E. Jagla**, **H. Jensen**, **E. Kunau**, **A. Beh**, and **R. Singer**], cellulose. VIII., i, 142.
- Hess, K.**, and **W. Wustrow**, compounds of magnesium alkyl halides with carbonyl compounds and the reducing action of Grignard reagents. II., i, 859.
- Hess, K.** See also **W. Weltzien**.
- Hess, V. F.**, apparatus for purification of radium emanation, ii, 379.
- Hess, V. F.**, and **R. W. Lawson**, number of α -particles emitted by radium, ii, 587, 649.
- Hess, W.** See **P. Beyeradorfer**.
- Hess, W. R.**, viscosimetric investigations on lyophilic colloids, ii, 236.
- Hesse, E.**, action of alkali iodides on metabolism, i, 1011.
- Hessel, F. A.** See **H. Gault**.
- Heisert, K.** See **A. Reissert**.
- Hetherington, A. C.** See **J. B. Shoen-smith**.
- Heubner, J.** See **J. A. Hedvall**.
- Heubner, W.**, influence of "alkaloids" on permeability, i, 461.
- Heubner, W.**, and **R. Meier**, formation of methæmoglobin. IV., i, 229.

- Heubner, W., R. Meier, and H. Rhode**, formation of methæmoglobin. V., i, 229.
- Heubner, W., and H. Rhode**, formation of methæmoglobin. II., i, 229.
- Heuck, C.** See **H. Lecher**.
- Heukelekian, H.**, decomposition of cellulose by various groups of micro-organisms of the soil, i, 1270.
- Heukelekian, O.** See **S. A. Waksman**.
- Heuse, W.** See **F. Henning**.
- Heuser, E., and W. Ackermann**, acetylation of lignin, i, 619.
- Heuser, E., and S. S. Aiyar**, wood cellulose, i, 268.
- Heuser, E., and W. Dammel**, mannan content of wood-cellulose and its analytical determination, i, 1171.
- Heuser, E., and F. Herrmann**, potash fusion of lignin, cellulose, and wood, i, 376.
- Heuser, E., and O. Merlau**, comparison of the action of chlorine and chlorine dioxide on wood, ii, 128.
- Heuser, E., and J. Roth**, pentosans. VII. Fusion of xylan with potassium hydroxide, i, 497.
- Heuser, E., and F. Schneider**, carbonic esters of cellulose, i, 1171.
- Heuser, E., and W. Schott**, hydroxymethylfurfuraldehyde from cellulose and its derivatives, i, 198.
- Heuser, H.** See **W. Strecker**.
- Hevesy, G. von**, correlation between boiling point and conductivity of electrolytic liquids, ii, 16.
- hafnium content of some historical zirconium preparations, ii, 267.
- Hevesy, G. von, and V. T. Jantzen**, separation of hafnium from zirconium, ii, 53.
- hafnium content of zirconium ores, ii, 492.
- hafnium content of zirconium minerals. I. and II., ii, 571, 620.
- Hevesy, G. von.** See also **J. A. Christiansen**.
- Hewitt, J. A.**, metabolism of carbohydrates. III. Absorption of glucose, fructose, and galactose from the small intestine, i, 585.
- Hewitt, J. A.** See also **J. W. Pickering**.
- Hewlett, C. W.**, scattering of X-rays by liquid benzene, mesitylene, and octane, and by diamond splints, ii, 816.
- Heyl, F. W.**, constituents of ragweed pollen, i, 924.
- Heyl, F. W., and B. Fullerton**, simultaneous determination of minute quantities of sulphur and phosphorus, ii, 566.
- Heyl, F. W.** See also **M. C. Hart**.
- Heymann, E.** See **W. Fraenkel, and H. Wolf**.
- Heyna, J.** See **K. von Auwers**.
- Heyrovsky, J.**, significance of the electrode potential, ii, 457.
- processes at the mercury dropping cathode. I. Deposition of metals, ii, 598.
- processes at the mercury dropping cathode. II. Hydrogen overpotential, ii, 599.
- Hibbard, P. L.**, comparison of the soil solution by the displacement method and the water extract of alkali soils, i, 598.
- turbidimetric determination of precipitates, ii, 694.
- Hibbert, (Miss) E.** See **E. Knecht**.
- Hibbert, H., and L. T. Cannon**, condensation of citral with ketones and synthesis of some new ionones, i, 262.
- Hibbert, H., and R. R. Read**, reactions relating to carbohydrates and polysaccharides. VIII. Electrolytic reduction of carbonyl derivatives, i, 613.
- Hibbert, H., and J. A. Timm**, cellulose chemistry. IV. Properties of $\gamma\delta$ -dihydroxycarbonyl derivatives and their bearing on the polymerisation of polysaccharides, i, 16.
- carbohydrates and polysaccharides. X. Synthesis and relative stability of cyclic acetals from $\alpha\beta$ - and $\alpha\gamma$ -glycols, i, 710.
- Hibbert, H.** See also **H. S. Hill, and R. R. Read**.
- Hibsch, J. E.** See **E. Dittler**.
- Hicks, W. M.**, the "missing element" between cadmium and mercury, ii, 412.
- Hidnert, P., and W. B. Gero**, thermal expansion of molybdenum, ii, 618.
- Hieber, W.**, ring formation in additive compounds. I. Cyclic molecular compounds of the stannic halides, i, 1249.
- Hiebert, P. G.** See **O. Maass**.
- Hieulle, A.** See **R. Fosse**.
- Higginbotham, L.** See **R. G. Fargher**.
- Higley, H. P., and J. H. Mathews**, absorption spectrum of gelatin as a function of hydrogen-ion concentration, ii, 460.
- Higson, J.** See **J. B. Firth**.
- Higuchi, S.**, absorption of near infra-red radiation by alums, ii, 712.
- Hilbert, A.** See **R. Anschütz**.
- Hild, W.** See **O. Fischer**.
- Hildebrand, J. H., T. R. Hogness, and N. W. Taylor**, solubility. IX. Metallic solutions, ii, 94.

- Hildebrand, J. H., H. B. Merrill, and J. Simons**, attempts to prepare a fluocarbonate: bearing on the co-ordination number of carbon, ii, 854.
- Hildebrand, J. H.** See also **P. Finkle, and J. Simons.**
- Hilger, J.** See **H. Fischer.**
- Hill, A. E.**, preparation and properties of diphenyl-4:4'-diarsinic acid, i, 1247.
- Hill, A. E., and R. Macy**, ternary systems. II. Silver perchlorate, aniline, and water, ii, 679.
- Hill, A. J., and E. H. Nason**, utilisation of cassia oil for the synthesis of cinnamyl alcohol, i, 1308.
- Hill, A. V., C. H. N. Long, and H. Lupton**, muscular exercise, lactic acid, and the supply and utilisation of oxygen. I.-III., IV.-VI., i, 1123, 1363.
- Hill, A. V.** See also **W. Hartree.**
- Hill, H. S., and H. Hibbert**, carbohydrates and polysaccharides. V. Use of acetylene for the synthesis of cyclic acetals, i, 133.
- carbohydrates and polysaccharides. VI. Relative ease of formation of five- and six-membered heterocyclic carbon-oxygen configurations, i, 134.
- carbohydrates and polysaccharides. VII. The ease of formation and nature of certain six-, seven-, and larger carbon-oxygen cyclic structures, i, 134.
- Hill, L.** See **T. A. Webster.**
- Hill, R., and O. R. Howell**, crystal structure and absorption spectra; the cobaltous compounds, ii, 817.
- Hill, R. M., and H. B. Lewis**, metabolism of sulphur. VII. Oxidation of sulphur compounds related to cystine in the animal organism. VIII. Behaviour of thiophenol and thiocresol in the animal organism, i, 788.
- Hill, T. G.** See **P. Haas.**
- Himwich, H. E., and D. P. Barr**, physiology of muscular exercise. V. Oxygen relationships in the arterial blood, i, 111.
- Himwich, H. E., R. O. Loebel, and D. P. Barr**, effect of exercise in diabetes. I., i, 786.
- Himwich, H. E.** See also **O. Meyerhof.**
- Hindmarsh, H. M., and H. Priestley**, determination of urea in 0.1 c.c. of blood, ii, 359.
- Hiner, E.** See **H. V. Tartar.**
- Hingst, G.** See **O. Mumm.**
- Hinkel, L. E.**, conversion of hydro-aromatic into aromatic compounds. I. Action of chlorine on 5-chloro-1:1-dimethyl- Δ^4 -cyclohexen-3-one, i, 1204.
- Hinner, W.** See **B. M. Margosches.**
- Hino, S.**, arginase in bacteria, i, 474.
- Hinsberg, O.**, preparation of nucleus-substituted hydroxyl derivatives of β -amino- α -hydroxy- α -arylethanes and β -amino- α -bisarylethanes, i, 167.
- oxides of the stereoisomeric trithio-benzaldehydes, i, 519.
- derivatives of *iso*- α -naphthyl-1:4-dihydroxy- β -naphthylsulphone. II., i, 728.
- trimethylene trisulphides, i, 759.
- preparation of an additive product of codeine, i, 1101.
- Hinshelwood, C. N.**, kinetics of the interaction of nitrous oxide and hydrogen, ii, 751.
- Hinshelwood, C. N., and R. E. Burk**, homogeneous thermal decomposition of nitrous oxide, ii, 751.
- Hinshelwood, C. N., and J. Hughes**, thermal decomposition of chlorine monoxide. II. Relation to the general theory of bimolecular reactions, ii, 749.
- Hinshelwood, C. N., and B. Topley**, unimolecular decomposition of phosphine, ii, 251.
- Hintikka, S. V.**, lignosulphonic acid and the lactone of waste sulphite liquors, i, 269.
- Hinton, C. L., and T. Macara**, application of the iodometric method to the analysis of sugar products, ii, 209.
- Hirabayashi, K.** See **D. Nishida.**
- Hirabayashi, N.**, nitrogen and mineral salt metabolism in avitaminosis, i, 587.
- Hirata, H.**, constitution of the X-ray spectra belonging to the L-series of the elements, ii, 83.
- Hirsch, E. F.**, changes in pH of blood with coagulation, i, 1367.
- Hirsch, P.**, new possibilities of acidimetry applied to proteins and their hydrolytic products, ii, 795.
- Hirsch, P.** See also **H. Kionka.**
- Hirst, E. L.** See **(Sir) J. C. Irvine.**
- Hirth, A., and A. Klotz**, determination of calcium in blood by de Waard's method, ii, 425.
- Hiruma, K.**, the chemical differential diagnosis of transudates and exudates, i, 243.
- permeability in non-electrolytic solutions, i, 1012.

- Hisamura, T.**, and **Y. Imaoka**, the generation of ethylene from alcohol, i, 254.
- Hissink, D. J.** See **R. M. Barnette**.
- Hitchcock, D. I.**, conductivity titration of gelatin solutions with acids, i, 104.
isoelectric point of gelatin at 40°, ii, 460.
solubility of tyrosine in acid and alkali, ii, 728.
- Hitchins, A. F. R.** See **F. Soddy**.
- Hixon, R. M.**, amino- and oximo-derivatives of thymoquinone, i, 291.
- Hizume, K.**, diastases; the two enzyme theory, i, 798.
phenolases in the blood, i, 1145.
- Hoagland, D. R.**, the absorption of ions by plants, i, 127.
- Hoagland, D. R.**, and **J. C. Martin**, effect of salts on the intake of inorganic elements and on the buffer system of the plant, i, 922.
- Hoagland, R.** See **W. C. Powick**.
- Hochheim, E.** See **E. Freundlich**.
- Hodgson, H. H.**, tautomerism with respect to nitrosophenols, i, 725.
direct sulphuration of aniline, i, 1188.
mechanism of aniline thionation [sulphuration] with observations on the therapeutical importance of the dithioanilines, i, 1188.
- Hodgson, H. H.**, and **P. Anderson**, mononitration of *p*-chlorotoluene, i, 1294.
- Hodgson, H. H.**, and **E. Kilner**, preparation of 2- and 4-nitro-*a*-naphthols, i, 637.
- Hodgson, V. O. J.**, action of ozonised oxygen on mercury, ii, 261.
- Höber, R.**, and **A. Memmesheimer**, changes in the permeability of red blood-corpuscles in non-electrolytic solutions, i, 113.
- Högler, F.**, and **K. Ueberrack**, distribution of blood-sugar between corpuscles and plasma, i, 1124.
participation of chlorides between plasma and corpuscles in human blood, i, 1124.
- Höjendahl, K.**, isothermal reaction velocity in homo-heterogeneous systems in absence of solvent, ii, 601.
electrical conductivity and certain other properties of metals and alloys on the basis of Bohr's theory, ii, 647.
induced alternate polarities in a carbon chain on the basis of Bohr's theory, ii, 722.
- Hoel, A. B.** See **A. W. Browne**.
- Hoeltzenbein, F.**, diffusion coefficients of salts by Weber's method, ii, 455.
- Hönig, M.**, and **F. Tempus**, stepwise oxidation of dextrose, i, 712.
- Hönigschmid, O.**, and **A. Meuwesen**, revision of the atomic weight of yttrium; analysis of yttrium chloride. I., ii, 860.
- Hönigschmid, O.**, and **E. Zintl**, revision of the atomic weight of bromine by the complete synthesis of silver bromide, ii, 35.
- Hönigschmid, O.**, **E. Zintl**, and **M. Linhard**, revision of the atomic weight of antimony; analysis of antimony trichloride and tribromide, ii, 619.
- Höpner, T.** See **W. Steinkopf**.
- Hoesch, K.**, determination of bilirubin in urine, ii, 76.
- Hoesslin, H. von**, and **H. Pringsheim**, the physiology of the polyamyloses. II. Glycogen formation and animal combustion, i, 117.
- Hoeven, B. J. C. van der.** See **P. A. Levene**.
- Hoffer, G. N.**, and **J. F. Trost**, accumulation of iron and aluminium compounds in maize plants and its probable relation to root rots. II., i, 925.
- Hoffert, (Miss) D.** See **(Mrs.) I. S. Maclean**.
- Hoffman, W. F.** See **R. A. Gortner**, and **J. A. Harris**.
- Hoffmann, G.**, radioactivity of the alkalis, ii, 86.
measurement of feeble radioactivity and the radioactivity of alkali metals and some other substances, ii, 718.
- Hoffmann, H.**, and **H. Mark**, crystal structure of oxalic acid, ii, 650.
- Hoffmann, R.** See **H. Kerstein**.
- Hoffmann, La Roche & Co., F.**, alkylisopropylbarbituric acids, i, 211.
- Hoffmeister, W.** See **E. Appelt**.
- Hofmann, K. A.**, **F. Hartmann**, and **F. Kroll**, hydroxylamine, hydrazine, and their derivatives as "oxidising agents" in the formation of induline, i, 882.
- Hofmann, K. A.**, and **F. Kroll**, thermal decomposition of salts of hydroxylamine and hydrazine, ii, 545.
- Hofmann, K. A.**, and **P. Kronenberg**, preparation of ozone by means of flames as a lecture experiment, ii, 603.
- Hofmann, K. A.**, and **W. Linnmann**, action on ammonia on potassium chlorate and the replacement of chlorine by nascent nitrogen, ii, 477.
- Hogness, T. R.**, and **E. G. Lunn**, ionisation potentials of hydrogen as interpreted by positive-ray analysis, ii, 807.
- Hogness, T. R.** See also **J. H. Hildebrand**.

- Hohlfeld, E.** See *O. Ruff*.
- Hojer, H.** See *O. Fischer*.
- Holborn, L., and J. Otto,** isotherms of gases at 400°, and their importance for the gas thermometer, ii, 385.
- Holde, D.,** the stereoisomerism of brassidic and erucic acids, i, 135.
- Holde, D., and K. Rietz,** elaidic acid and its anhydride, i, 260.
- Holde, D., J. Ripper, and F. Zadek,** palmitic and stearic anhydrides, i, 2-9.
- Holden, E. F.,** cause of colour in rose quartz, ii, 620.
- Holden, H. F.,** respiration and fermentation, i, 893.
- Holladay, J. A., and T. R. Cunningham,** experiments relative to the determination of uranium by means of cupferron, ii, 125.
- Hollande, A. C.,** coloration of so-called "oxydasic" granulations of cells obtained by synthesis with indophenol and hydroxybenzidine, i, 781.
- Hollander, F.** See *J. M. Nelson*.
- Holleman, A. F., and H. J. Choufoer,** disaccharins, i, 1070.
- Holló, J., and S. Weiss,** influence of oxygen content on the hydrogen-ion concentration of the blood, i, 583.
- Holluta, J.,** mechanism of the reduction of permanganate and its physico-chemical basis. VII. The reduction of manganate by formaldehyde, ii, 115.
mechanism of the reduction of permanganate and its physico-chemical basis. VIII. Kinetics and the hydroxyl-ion influence in the stepped reaction manganate-formaldehyde-formate, ii, 187.
- Holm, G. E., and G. R. Greenbank,** quantitative aspects of the Kreis test. II., ii, 507.
- Holm, G. E.** See also *G. R. Greenbank*.
- Holmbergh, O.,** degradation of starch by animal amylases, i, 691.
action of potassium iodide on the saccharification of starch by various amylases, i, 691.
liver amylase, i, 799.
- Holmboe, C. F.,** the effect of absorption of carbon dioxide on the conductivity of the sodium hydroxide electrolyte employed in an open type of cell for producing hydrogen and oxygen, ii, 15.
effect of intermediate oxides on the electrolytic short-circuiting effect, ii, 538.
- Holmes, A. D.,** vitamin potency of cod-liver oil, i, 685.
- Holmes, A. D., and R. H. Kerr,** ether extract of faeces, i, 460.
- Holmes, E.** See *G. T. Morgan*.
- Holmes, W. C.,** spectroscopy of the sulphonated indigotins, i, 424.
absorption spectra of certain derivatives of *p*-cymene, i, 576.
photochemical decomposition of oxalic acid in the presence of uranium salts, i, 939.
the influence of variation in concentration on the absorption spectra of dye solutions, ii, 138.
spectrophotometric determination of hydrogen-ion concentrations and of the apparent dissociation constants of indicators. I. Methods, ii, 346.
influence of constitutional variation in dyes on their relative absorption in aqueous and alcoholic solutions, ii, 805.
- Holmes, W. C., and J. F. Darling,** hydrolysis of auramine, i, 1351.
- Holroyd, G. W. F., and J. E. W. Rhodes,** electrolysis of potassium oleate, i, 364.
- Holschneider, F.** See *H. Lecher*.
- Holsten, H.** See *J. Meisenheimer*.
- Holt, H. S., and E. E. Keid,** effect of sulphur on the colour of certain phthaleins, i, 1309.
effect of sulphur on the colour of triphenylmethane dyes, i, 1350.
- Holtan, E.** See *F. Farup*.
- Holtmark, J.,** broadening of spectral lines. II., ii, 363.
- Holtz, F.,** occurrence of agmatine in lower animals, i, 906.
- Holtz, F., F. Kutscher, and F. Thielmann,** occurrence of trigonelline in the animal world, i, 907.
- Holtz, F.** See also *D. Ackermann*.
- Homann, E.** See *R. Seyderhelm*.
- Honcamp, F., E. Müller, F. Pommer, and K. Soika,** composition and digestibility of lupinus and lupin offals, before and after the removal of the bitter principle; and the loss of crude and digestible foodstuff resulting from different processes of removal of the bitter substances, i, 1155.
- Honda, K.,** definitions of steel and cast iron, ii, 188.
- Honda, K., and I. Igarasi,** has pure aluminium a transformation point? ii, 554.
- Honda, K., and T. Murakami,** structural constitution of iron-carbon-silicon alloys, ii, 556.
- Hongo, G.** See *Y. Asahina, and S. Takagi*.
- Honnellaitre, A.** See *E. Darmaois*.

- Hopfield, J. J.**, series spectra in oxygen in the region 900-1400, ii, 578.
- Hopfield, J. J.**, and **R. T. Birge**, spectral series in the oxygen group, ii, 2.
- Hopfield, J. J.**, and **S. W. Leifson**, wave-length standards in the extreme ultra-violet, ii, 134.
- Hopkins, H. H.** See **M. T. Bogert**.
- Hoppert, C.**, biochemical method of resolving racemic amino-acids, i, 1147.
- Hopping, A.**, seasonal changes in the gases and sugar of the blood, and the nitrogen distribution in the blood and urine of the alligator, i, 582.
- Hoppman, H.** See **A. Reissert**.
- Horiuchi, K.** See **Y. Tanaka**.
- Horlacher, E.** See **P. Karrer**.
- Horsters, H.** See **T. Brugsch**.
- Horton, F.**, and **A. C. Davies**, continuous spectrum of hydrogen, ii, 217.
- Horton, L.** See **F. Dickens**.
- Hoshino, I.**, and the **Daiichi Seiyaku Kabushiki Kaisha**, 3:4-dihydroxy-phenylmethylaminoethanol (adrenaline), i, 284.
- Hotes, E.** See **A. Sonn**.
- Hothersall, A. W.**, determination of vanadium by reduction with hydrogen peroxide and titration with potassium permanganate, ii, 629.
- Hottinger, A.**, [biological] action of sulphur, i, 899.
- Houssay, B. A.**, and **J. Negrete**, venom of *Lachesis ammodytoides*, i, 688.
- Houston, B.** See **A. W. Dox**.
- Howard, H. C.**, and **G. A. Hulett**, density of carbon, ii, 823.
- Howard, J. W.**, and **C. G. Derrick**, the mechanism of the Hofmann rearrangement of methylaniline hydrochloride, i, 277.
- Howard, J. W.**, and **F. D. Stimpert**, antiseptic action of the zinc chloride salt of aniline, i, 249.
- Howe, A. B.** See **J. R. Partington**.
- Howe, J. L.**, **J. L. Howe, jun.**, and **S. C. Ogburn, jun.**, ruthenium dichloride, ii, 344.
- Howe, J. L., jun.** See **J. L. Howe**.
- Howe, P. E.**, extraction and precipitation of soluble proteins of muscle, i, 1255.
- Howell, O. R.** See **R. Hill**.
- Howells, H. P.** See **G. H. Coleman**.
- Hoves, H. L.** See **E. L. Nichols**.
- Howland, J.**, and **B. Kramer**, relationship between the calcium and inorganic phosphorus of the serum in rickets and tetany, i, 1011.
- Hoyt, F. C.**, relative probabilities of transitions involved in the Balmer series lines of hydrogen, ii, 433.
- Hsu, T.**, adsorption of trypsin by filter-paper, i, 472.
- gelatinolytic liver enzyme, i, 902.
- Hubbard, R. S.**, excretion of ammonia and nitrogen, i, 459.
- Hubbard, R. S.**, **S. A. Munford**, and **E. G. Allen**, gastric secretion and the "alkaline tide" in urine, i, 1257.
- Hubbard, R. S.**, and **F. R. Wright**, variations in rate of excretion of acetone compounds, i, 1257.
- Huber, A.**, chemical nature of the purple of Cassius, ii, 229.
- Hudleston, L. J.**, criticism of distillation method of measuring vapour pressure, ii, 725.
- Hudleston, L. J.** See also **C. W. Davies**, **D. B. Jehu**, and **W. F. K. Wynne-Jones**.
- Hudson, C. S.**, relations between rotatory power and structure in the sugar group. I. The halogenoacyl and nitroacyl derivatives of the aldose sugars, i, 371.
- relations between rotatory power and structure in the sugar group. II. The halogenoacetyl derivatives of a ketose sugar [*d*-fructose], i, 372.
- relations between rotatory power and structure in the sugar group. III. The biase of amygdalin [gentiobiose] and its configuration, i, 372.
- Hudson, C. S.**, and **K. P. Monroe**, relation between rotatory power and structure in the sugar group. IV. Two isomeric crystalline hexa-acetates of *d*- α -mannoheptose, i, 617.
- Hudson, W. E.** See **R. S. Dean**.
- Hückel, W.**, stereoisomerism of decahydronaphthalene and its derivatives, i, 31.
- Hückel, W.**, and **E. Goth**, preparation of γ -*o*-carboxyphenyl-*n*-butyric acid, i, 1196.
- Hüttig, G. F.**, use of filter-plates made of sintered glass, ii, 247.
- Hüttig, G. F.**, and **F. Pohle**, lithium. II. Hydrates of lithium iodide, ii, 676.
- Hüttig, G. F.**, and **F. Renschler**, lithium. I. Hydrates of lithium chloride and bromide, ii, 756.
- Hüttig, G. F.**, and **K. Schmitz**, use of porcelain crucibles with porous bottoms in analytical chemistry, ii, 561.
- Hufferd, R. W.**, qualitative analysis of the tin group, ii, 570.

- Huggins, M. L.**, crystal structure of aluminium carbide, determined without the use of X-rays, ii, 817.
atomic radii, ii, 819.
crystal structures of some sulphides, selenides, and tellurides, ii, 849.
crystal structures of some tetragonal crystals, ii, 866.
- Hughes, A. L.** [results of electron impacts in gases], ii, 646.
- Hughes, A. L.**, and **C. F. Hagenow**, low-voltage excitation of the spectrum of caesium, ii, 709.
- Hughes, A. L.**, and **E. Klein**, ionisation of gases as a function of the energy of electron impacts, ii, 375.
- Hughes, A. L.**, and **P. Lowe**, intensity relations in the hydrogen spectrum produced by electron impacts, ii, 799.
- Hughes, J.** See **C. N. Hinshelwood**.
- Hughes, T. A.** See **C. H. Kellaway**.
- Hughesdon, R. S.** See **J. Read**.
- Hugounenq, L.**, **G. Florence**, and **E. Couture**, the biuret reaction, i, 17.
- Hugounenq, L.**, and **J. Loiseleur**, catalytic effect exercised by certain colloids, especially glycogen, in the hydrolysis of proteins, i, 1008.
- Hulburt, E. O.**, Balmer absorption series of hydrogen, ii, 439.
quartz spectrograph, ii, 511.
width of the hydrogen lines in stellar spectra, ii, 637.
absorption lines in the spectrum of the metallic spark in water, ii, 640.
- Hulett, G. A.** See **H. C. Howard**.
- Hume, H. V.**, and **W. Denis**, polarimetric observations on solutions of glucose after contact with intestinal mucosa, i, 784.
- Hume, H. V.** See also **W. Denis**.
- Hume, J.**, dilatometer for use with very unstable compounds, ii, 469.
- Humphreys, R. W.** See **J. Pryde**.
- Hund, F.**, the Rydberg correction and the radius of ions, ii, 861.
- Hunt, C. H.**, **A. R. Winter**, **J. A. Schultz**, and **R. C. Miller**, mineral metabolism of the lactating and dry goat, i, 587.
- Hunter, A.**, and **H. Borsook**, distribution of nitrogen in globin, i, 103.
- Hunter, G.**, distribution and variation of carnosine in cat muscle, i, 791.
- Hunter, H.**, dependence of rotatory power on chemical constitution. XXI. Some compounds containing the secondary octyl radical linked to oxygen, i, 933.
intense lithium flame for polarimetric use, ii, 542.
- Hunter, H.**, dependence of rotatory power on chemical constitution. XXI. The chemical significance of rotatory dispersion, ii, 645.
- Hunter, L.**, halogenation of s.-dipotassium tetranitroethane, i, 1028.
- Hunter, L.** See also **R. A. Gotta**, and **R. O. Griffith**.
- Hunter, R. F.**, 4'-amino-1-phenyl-5-methylbenzthiazole and its bromination in glacial acetic acid; the dibromo-product of Gattermann; the fluorescence of some benzthiazoles, i, 208.
- Hupe, R.** See **A. Windaus**.
- Hurd, A. M.**, the acidity of maize and its relation to vegetative vigour, i, 353.
course of acidity changes during the growth period of wheat with special reference to stem rust resistance, i, 1021.
- Hurd, C. B.** See **C. A. Kraus**.
- Hurd, C. D.**, ketenic decomposition of ketones; keten and methylketen, i, 140.
- Hurst, W. W.**, and **E. K. Rideal**, promoting action of palladium on copper. I. Catalytic combustion, ii, 321.
promoting action of palladium on copper. II. Adsorption of hydrogen and carbon monoxide, ii, 321.
- Husa, W. J.** See **E. W. Rockwood**.
- Husband, A. D.** See **M. B. Richards**.
- Hutchinson, H. B.**, **W. Smith**, and **L. B. Winter**, studies on carbohydrate metabolism. II. On the preparation of an anti-diabetic hormone from yeast. I, i, 344.
studies on carbohydrate metabolism. III. On the formation of an anti-diabetic hormone by the action of a bacillus. i, 345.
- Hutchinson, R. O.**, arc and spark spectra of aluminium, zinc, and carbon in the extreme ultra-violet, ii, 365.
- Huthmann, P.** See **R. Weinland**.
- Huttner, K.** See **W. Prandtl**.
- Hylan, M. C.** See **F. E. E. Germann**.
- Hyndman, O. R.** See **D. I. Macht**.
- Hyslop, W. McN.** See **F. J. Wilson**.

I.

- Ichinose, H.** See **S. Koizumi**.
- Igarasi, I.** See **K. Honda**.
- Iguchi, K.**, composition of herring roe. VI. Monoamino-acids of ichthulin, i, 793.

- Ikeda, T.** See *R. Majima*.
- Ilberg, K.** See *O. Diels*.
- Ilijn, B.**, general theory of the phenomenon of sorption, ii, 92.
adsorption forces and their electrical nature, ii, 663.
- Ilijn, S.** See *L. Tschugaev*.
- Ilijn, W. S.**, degradation of starch by salts, i, 500.
- Ilijnsky, W. P.** See *P. P. Fedotéev*.
- Imai, T.**, methylated proteins. I. Action of proteolytic enzymes on methylated proteins, i, 920.
methylated proteins. II. Hydrolysis of methylated casein, i, 920.
methylated proteins. III. Action of erepsin on methylated polypeptides, i, 920.
action of erepsin on benzoyleated polypeptides, i, 921.
- Imaoka, Y.** See *T. Hisamura*.
- Imbert, H., R. Imbert, and P. Pilgrain**, Schoenbein's test applied to the microinvestigation of copper ions, ii, 203.
- Imbert, R.** See *H. Imbert*.
- Inaba, K.**, catalysts for the oxidation of ammonia. II. Sand-iron briquette as a catalyst. III. Effect of impurities in the catalyst, ii, 249.
- Inderhees, R.** See *R. Anschütz*.
- Ing, H. R. and W. H. Perkin, jun.**, configuration of $\alpha\alpha'$ -dibromo-dibasic acids. III. The $\alpha\alpha'$ -dibromosuccinic acids, i, 1162.
- Ing, H. R.** See also *A. W. Bernton*.
- Ingersoll, L. R.**, magnetic rotation in sputtered cobalt films, ii, 441.
- Inglebrecht, P.** See *P. Fonteyne*.
- Ingold, C. K.**, the additive formation of four-membered rings. III. The nomenclature of four-membered rings and the formation and properties of some derivatives of methylene-1:2:4-oxadi-imine, i, 322.
- Ingold, C. K., J. H. Oliver, and J. F. Thorpe**, glutaconic acids. XVII. Tendency towards reversion to type, i, 1282.
- Ingold, C. K., and H. A. Piggott**, the additive formation of four-membered rings. IV. The influence of temperature on the tendency towards self-addition of the nitroso-group, i, 323.
- Ingold, C. K., and S. D. Weaver**, the additive formation of four-membered rings. V. Formation of stable dimethylene-1:2-oxamines from ethylenes and nitroso-compounds, with special reference to the direction of the addition, i, 1116.
- Ingold, C. K.** See also *J. W. Baker*, and *F. R. Goss*.
- Ingold, (Mrs.) E. H.**, correlation of additive reactions with tautomeric change. II. Reversibility in relation to the stability of carbon chains, i, 368.
correlation of additive reactions with tautomeric change. III. The cyano-imino additive process, i, 853.
tautomerism of dyads. II. Acetylene and its halogen derivatives, i, 1026.
- Inoue, H.**, preparation of tetralin [tetrahydronaphthalene], i, 628.
catalytic reduction of phenol and α -naphthol under high pressure, i, 635.
two oximes of α -ketotetrahydronaphthalene, i, 647.
- Ionescu, A., and (Mlle.) E. Spirescu**, volumetric method for the determination of the alkaloids, ii, 211.
- Iredale, T.**, adsorption from the gas phase at a liquid-gas interface. II, ii, 663.
- Irvine, (Sir) J. C., and W. Burt**, derivatives of a new form of mannose, i, 944.
- Irvine, (Sir) J. C., and G. V. Francis**, examination of photosynthetic sugars by the methylation method, i, 1286.
- Irvine, (Sir) J. C., and H. S. Gilchrist**, the condensation of mannitol with olive oil, i, 258.
a synthetic fat containing a methylglucoside residue, i, 264.
- Irvine, (Sir) J. C., and E. L. Hirst**, polysaccharides. VII. Esparto cellulose, i, 269.
- Irvine, (Sir) J. C., H. Pringsheim, and J. Macdonald**, polysaccharides. VIII. Molecular structure of β -hexa-amylose, i, 617.
- Irvine, (Sir) J. C.** See also *P. T. Her-ring*.
- Isaac, K. J., and I. Masson**, accurate calibration of capillary tubes, ii, 245.
- Isaacs, L.**, presence of silicon in tissues; micro-method for determining silicon, ii, 499.
- Isberg, A.** See *K. Kindler*.
- Isgarischev, N., and E. Koldaeva**, potential of poisoned electrodes, ii, 527.
- Isgarischev, N., and A. Pomeranzev**, velocity of hydrogen ions in gels under the influence of a current, ii, 90.
- Isgarischev, N., and D. Stepanov**, influence of fluoride on overvoltage, ii, 527.
- Ishibashi, M.**, electrolytic reduction of oximes. I. Benzoinoxime, i, 183.
electrolytic reduction of acid oximes, i, 621.

- Ishikawa, F.**, the theoretical heat of dissolution of hydrated salts (copper sulphate), ii, 20.
- Ishikawa, S.**, condensation of nitriles with thioamides. II. Acetonitrile with thiobenzamide, and benzonitrile with thioacetamide, i, 639.
- Ishimaru, S.**, the preservation of standard solutions of oxalic acid, ii, 198.
- Ishio, M.**, bromine derivatives of α -elæostearic acid, i, 364.
- Ishiwara, E.**, new catalytic-electrolytic method of reduction, i, 960.
fugutoxin, i, 1133.
indene series, i, 1205.
- Ishiwara, F.** See also **H. Freundlich**.
- Isnard, E.**, detection of aldehydes in chloroform and alcohol, ii, 633.
- Issekutz, B. von, and A. Tukats**, action of iodoethylurethane and iodoethyl allophanate, i, 591.
- Itagaki, T.** See **Y. Murayama**.
- Italiener, A.** See **A. Rosenheim**.
- Itallie, L. van, and A. Harmsma**, reactions between aldehydes and phenols, ii, 634.
- Itzkin, L. A.** See **M. A. Rakuzin**.
- Ivanitzky-Vassilenko, E. and A. Bach**, enzyme content of the blood. II. Variations in the catalase and protease figures during 24 hours in animals and man, i, 1253.
- Ivanov, C.** See **L. Tschugaev**.
- Ivanov, N. N.**, the accumulation and formation of urea in mushrooms, i, 353.
activity of urease in high concentrations of alcohol, i, 1145.
- Ivanov, V. N.**, a new compound of and test for palladium, ii, 196.
- Ives, H. E.**, variation with temperature of the photoelectric effect in potassium photoelectric cells, ii, 444.
- Ivitzky, M. P.**, action of carbonyl chloride on metallic derivatives of monosubstituted acetylenes. I. Action of carbonyl chloride on sodium *tert*-butylacetylide, i, 607.
- Ivy, A. C., and N. F. Fisher**, presence of insulin-like substance in gastric and duodenal mucosa, and its relation to gastric secretion, i, 1017.
- Iwatsuru, R.**, fats and lipoids in blood. I. Distribution of cholesterol and other lipoids in the blood of different animals, i, 1126.
- Iyer, K. R. K.**, the intermittent glow of phosphorus, ii, 39.
- Izaguirre, R. de**, influence of time on the physico-chemical properties of gelatin solutions, i, 231.
- Izumi, S.** See **H. Steudel**.
- J.**
- Jabłczyński, K.**, rhythmic formation of precipitates; Liesegang's rings, ii, 157.
vapour pressure and the law of equilibrium for electrolytes, ii, 525.
Liesegang's phenomenon, ii, 530.
- Jabłczyński, K.** [with **M. Fordonski, R. Frankowski, J. Lisiecki**, and (*Mlle.*) **A. Klein**], colloids of the second order, ii, 27.
- Jabłczyński, K.**, and (*Mlle.*) **A. Klein**, rate of formation of precipitates; precipitation in a colloidal medium; Liesegang's phenomenon, ii, 531.
- Jabłczyński, K., and J. Lisiecki**, rate of formation of precipitates. V. Ter- and quadri-valent ions; the change of mercuric iodide from yellow to red, ii, 534.
- Jack, D.** See **G. A. Carse**.
- Jackson, E. L.** See **J. B. Conant**.
- Jackson, H.**, nuclein metabolism. II. Isolation of a nucleotide from human blood, i, 783.
- Jackson, L. C., and H. K. Onnes**, magnetic properties of some paramagnetic double sulphates at low temperatures, ii, 90.
- Jackson, R. F., and C. G. Silsbee**, saturation relations in mixtures of sucrose, dextrose, and levulose, i, 1168.
- Jackson, V. T.**, apparatus for drying gases, ii, 245.
- Jackwirth, G.** See **F. Sauerwald**.
- Jacob, K. D.**, determination of nitrate nitrogen in the presence of calcium cyanamide and some of its derivatives, ii, 57.
- Jacob, K. D., F. E. Allison, and J. M. Braham**, chemical and biological studies with [calcium] cyanamide and some of its transformation products, i, 1156.
- Jacob, N.** See **G. Tocco**.
- Jacobs, W. A.**, strophanthin. II. The oxidation of strophanthidin, i, 65.
strophanthin. III. Crystalline kombe strophanthin, i, 67.
- Jacobs, W. A., and A. M. Collins**, strophanthin. IV. Anhydrostrophanthidin and dianhydrostrophanthidin, i, 867.
strophanthin. V. Isomerisation and oxidation of isostrophanthidin, i, 1331.
- Jacobsen, J. C.**, an experimental determination of the rate of decay of the short-life product radium-C', ii, 142.
- Jacobsen, J. C.** See also **A. Udden**.

- Jacobsohn, M.** See *M. Bergmann*.
- Jacobson, C. A.**, hydrofluosilicic acid. II., ii, 105.
hydrofluosilicic acid. III. Method of titrating and properties, ii, 782.
- Jacobson, R. A.**, and *R. Adams*, tri-hydroxymethylanthraquinones. III. Synthesis of emodin, i, 752.
- Jacquot, R.** See *E. F. Terroine*.
- Jäger, G.** See *F. L. Hahn*.
- Jaenisch, A.**, *o*-nitrophenylpropionic acid, i, 170.
- Järvinen, K. K.**, separation and determination of soluble carbonates, hydroxides, and salts of the sulphur acids and of elementary sulphur, ii, 421.
equation of state and compressibility of mercury, ii, 451.
- Jagla, (Frl.) E.** See *K. Hess*.
- Jahn, H.**, determination of two halogens in the presence of each other, ii, 419.
- Jakobson, M.**, photographic action of canal rays, ii, 244.
- Jaloustre, L.** See *Aversenq, P. Lemay*, and *A. Maubert*.
- James, C.** See *C. H. Lowe*.
- Jamieson, G. S.**, and *W. F. Baughman*, chemical composition of sesamé oil, i, 608.
- Janakiram, A.** See *Y. Venkataramaiah*.
- Jander, G.**, and *H. Beste*, use of potassium dichromate in iodometry, ii, 497.
Bunsen's iodometric distillation method of determining highly oxidised substances, ii, 497.
- Jander, G.**, and *H. Feit*, volatility of bromine in solutions of different electrolytes and its bearing on bromometric analysis, ii, 604.
- Jander, G.**, and *W. Jander* [with *H. Maas*], chemical analysis with membrane filters. IV. Nature of the filter and its application in analytical chemistry, ii, 269.
- Jander, G.**, and *E. Manegold*, [apparatus for] conductometric titrations, ii, 496.
- Jander, G.**, and *K. Reeh*, determination of phosphoric acid by means of uranyl acetate solution, ii, 58.
determination of uranyl compounds, ii, 65.
- Jander, G.**, and *B. Weber*, determination of aluminium and its separation from other metals, ii, 62.
precipitation of hydrated aluminium oxide by means of ammonia, ii, 264.
- Jander, W.**, preparation of pure uranium, ii, 767.
- Jander, W.** See also *G. Jander*.
- Janek, A.**, transport apparatus, ii, 247.
coagulation of dispersoid solutions on the surfaces between contiguous phases, ii, 534.
- Janet, (Mlle.) M.** See *M. Mestrezat*.
- Jankowska, W.** See *J. Dadlez*.
- Jantzen, V. T.** See *G. von Hevesy*.
- Jarman, J.** See *J. C. Philip*.
- Jauncey, G. E. M.**, the scattering of X-rays and Bragg's law, ii, 299.
chance of electrons being ejected photoelectrically from atoms by X-rays, ii, 647.
- Jauncey, G. E. M.**, and *H. L. May*, intensity of the X-rays scattered from rock salt, ii, 298.
- Jazyna, W.**, relationship between specific heat, *C_v*, of the internal energy *U* and the equation of state of bodies on the basis of the second law of thermodynamics, ii, 589.
- Jehu, D. B.**, and *L. J. Hudleston*, solubility of sodium fluoride in hydrofluoric acid, ii, 675.
- Jele, F.** See *A. Zinke*.
- Jeletzky, N. P.** See *A. E. Tschitschibabin*.
- Jelinek, H.** See *F. Jirsa*.
- Jellinek, K.**, and *H. Gordon*, complexity of some metal tartrate ions and the solubility products of certain metallic hydroxides and sulphides, ii, 836.
- Jellinek, K.**, and *W. Kretev*, new methods of volumetric analysis. V. Chlorometry as a substitute for iodometry and other analytical methods, ii, 781.
- Jellinek, K.**, and *W. Kühn*, new methods of volumetric analysis. VI. and VII., ii, 695.
- Jellinek, K.**, and *G. Tomoff*, equilibria between sodium and potassium and their chlorides in the fused state and the production of alkaline-earth-lead alloys, ii, 658.
- Jellinek, K.**, and *L. Vinogradov*, titration of ferric chloride with thiosulphate, ii, 703.
reaction between ferric chloride and arsenious acid, ii, 836.
- Jendrassik, L.**, constant-level regulator for water distillation, ii, 246.
- Jenison, G. C.** See *F. J. Bacon*.
- Jenke, M.** See *S. J. Thannhauser*.
- Jenkins, J. D.** See *T. H. Walton*.
- Jenkins, R.** See *V. Grignard*.
- Jenkins, W. A.**, emission of positive ions from hot tungsten, ii, 443.
- Jensen, H.** See *K. Hess*.
- Jensen, O.** See *F. Foerster*.
- Jequier, G.** See *F. Kehrman*.
- Jernakov, C.** See *W. Biedermann*.

- Jeschki, K.** See *E. Späth*.
- Jevons, W.**, origin of certain spectral lines hitherto attributed to oxygen, ii, 214.
band spectrum of boron nitride, ii, 366.
band spectra of the oxide and nitride of boron, ii, 438.
band spectra of silicon oxide, and of the chlorides of silicon, carbon, boron, and aluminium, ii, 640.
- Jilek, A.** See *J. Hanus*.
- Jino, K.** See *L. Asher*.
- Jirsa, F.**, and *J. Fabinger*, dissolution of lead in alkaline liquids by alternating currents, ii, 554.
- Jirsa, F.**, and *H. Jelinek*, anodic oxidation of gold. II. Properties of auric sulphate, ii, 692.
- Jirů, P.** See *E. Votoček*.
- Job, A.**, the mechanism of chemical reaction, ii, 159.
- Job, A.**, and *G. Emschwiller*, photolysis of organic iodides; the photochemical threshold and energy of linking, i, 929.
photochemical threshold and energies of linking, ii, 719.
- Job, A.**, and *R. Reich*, organo-zinc compounds, i, 24.
fixation of unsaturated molecules by metals produced from their organo-metallic derivatives, i, 154.
catalytic activation of ethylene by an organo-nickelic compound, i, 1026.
- Job, P.**, electrometric study of the hydrolysis of salts, ii, 592.
- Jodé, J.** See *O. Gerngross*.
- Joffé, A.**, *A. W. Kirpitschewa*, and *M. A. Lewitzky*, deformation and strength of crystals, ii, 384.
- Joffe, J. S.**, and *H. J. Conn*, utilisation of dextrose in mineral media by bacteria with reference to acid formation, i, 1269.
- Joffe, J. S.**, and *H. C. McLean*, alkali soil investigations. I. Colloidal phenomena, i, 927.
- Jofnov, W.** See *A. Pamfilov*.
- John, G.** See *W. Borsche*.
- Johner, H.** See *W. D. Treadwell*.
- Johnson, F. M. G.**, and *P. Larose*, diffusion of oxygen through silver, ii, 750.
- Johnson, H. W.**, relationships between hydrogen-ion, hydroxyl-ion, and salt concentrations, and the growth of seven moulds, i, 126.
- Johnson, J. M.**, osmotic pressure of salvarsan and neosalvarsan solutions, ii, 591.
- Johnson, J. M.** See also *C. Voegtlin*.
- Johnson, L.** See *A. W. Thomas*.
- Johnson, R. C.**, ultra-violet emission bands of oxygen, ii, 510.
- Johnson, R. C.**, and *W. H. B. Cameron*, effect of argon on certain spectra, ii, 639.
- Johnson, T. B.**, and *H. W. Rinehart*, isomeric modifications of methylene-aminoacetonitrile and their biological significance, i, 625.
- Johnson, T. B.** See also *I. W. Bass*, *E. B. Brown*, and *H. W. Rinehart*.
- Johnston, C. G.** See *E. A. Doisy*.
- Johnston, J. A.** See *F. L. Babbott*, *jun.*
- Jokl, P.** See *E. Fromm*.
- Jolibois, P.**, and *L. Chassevent*, calcium sulphate solutions, ii, 483.
- Jolibois, P.**, and *G. Normand*, the decomposition of lead tetraethyl and its application to explosion motors, i, 951.
- Joly, J.** See *J. H. J. Poole*.
- Jonas, L.** See *G. E. Cullen*.
- Jonas, R.** See *O. Gerngross*.
- Jones, A. O.**, a burner for producing monochromatic light for polarimetry, etc., ii, 1.
- Jones, C. P.**, adsorption and absorption of bases by soils, i, 820.
- Jones, D. B.**, and *C. E. F. Gersdorff*, proteins of wheat bran. I. Isolation and elementary analyses of a globulin, albumin, and prolamine, i, 342.
- Jones, D. B.**, and *J. C. Murphy*, cystine deficiency and vitamin content of the lentil (*Lens esculenta*), i, 788.
- Jones, D. O.**, and *H. R. Lee*, titration of aniline and homologues, ii, 792.
- Jones, D. O.** See also *H. R. Lee*.
- Jones, G. W.** See *R. R. Sayers*.
- Jones, J. E.**, equation of state of a gas, ii, 519.
- Jones, L. W.**, and *E. B. Hartshorn*, amine oxides derived from 4-bromo-dimethylaniline and from 3- or 4-nitrodimeethylaniline, i, 1181.
- Jones, L. W.**, and *A. W. Scott*, hypnitrites, ii, 850.
- Jones, L. W.** See also *G. Dougherty*.
- Jones, T. W.**, attempt to correlate certain theories of solution, ii, 145.
- Jong, A. W. K. de**, biscoumaric acids, i, 644.
- Jong, H. G. B. de**, theory of vegetable tanning. II. Dehydration of the gelatin sol by tannic acid, crystalline tannins, and simpler phenols, i, 342.
electro-viscous effect in solutions of soluble starch, ii, 314.

- Jongh, S. G. de**, concentration-action curve of insulin preparations, and anti-insulin, i, 1387.
- Joos, G.**, and **H. Kulenkampff**, conservation of momentum in exciting and ionising collisions, ii, 514.
- Joos, G.** See also **E. von Angerer, K. Fajans**, and **P. Karrer**.
- Jordan, A.** See **Wilhelm Schneider**.
- Jordan, O.** See **K. von Auwers**.
- Jorissen, W. P.**, and **P. A. A. van der Beek**, compounds of piperonal and acetic anhydride, i, 1318.
- Jorissen, W. P.**, and **J. Velišek**, the influence of some non-inflammable vapours of organic liquids on the limits of inflammability of mixtures of methane and air, i, 253.
- Jorpes, E.**, and **E. G. Hellgren**, osmotic pressure of some electrolytes of high molecular weight, ii, 310.
- Joseph, A. F.**, and **J. S. Hancock**, composition and properties of clay, ii, 763.
- Josephson, K. O.**, affinity of invertase for different sugars. II., i, 801.
nitrogen content of invertase, i, 918.
affinity of invertase for different sugars. III. Identity of invertase and raffinase, i, 919.
invertase of *Aspergillus flavus*, i, 1143.
- Josephson, K. O.**, and **H. von Euler**, enzymic transformation of aldehydes. I. Acceleration of the Cannizzaro reaction by yeast, i, 694.
- Josephson, K. O.** See also **H. von Euler**, and **O. Svanberg**.
- Josephy, E.**, formation and decomposition of polythionates, ii, 470.
- Joshi, S. S.**, surface tension of oil-in-water and water-in-oil emulsions. I. and II., ii, 529, 731.
- Joszt, A.**, and **B. Starczewski**, diastatic power of the juice of different varieties of potatoes, i, 1383.
- Jouniaux, A.**, variation with temperature of the atomic condensation [molecular complexity] of antimony, gold, and silver, ii, 452.
variation of molecular weights of certain metals with temperature, ii, 612.
- Jürgens, H.** See **G. Heller**.
- Juillard, P.**, *p*-nitrobenzeneazopyrogallol (Chrome Brown P.A.), i, 435.
- Jung, H.** See **G. Linck**.
- Jungck, A.** See **W. Strecker**.
- Jungmann, H.**, and **M. Samter**, calcium content of the organs of cats treated with calcium [salts]. III. and IV., i, 452.
- Justin-Mueller, E.**, reaction of azine and thiazine dyes with the gel of *Chondrus crispus*, i, 567.
reactions of the alga *Chondrus crispus*, particularly with certain dyes used in therapy, i, 1154.
- K.**
- Kägi, H.**, rhythmic crystallisation, ii, 95.
- Källner, G.** See **F. Arndt**.
- Kämmerer, H.** See **H. Fischer**.
- Käppler, G.** See **F. Weigert**.
- Kaffer, H.**, application of Zelinski's method of catalytic dehydrogenation to the detection of decahydronaphthalenes in low-temperature tar, i, 1175.
- Kagan, S.** See **W. Rodionov**.
- Kahlenberg, H. H.** See **L. Kahlenberg**.
- Kahlenberg, L.**, and **H. H. Kahlenberg**, preparation of metallic tungsten and some of its alloys, ii, 766.
- Kahn, H.**, octyl mercaptan, i, 259.
- Kahn, M.**, odd-carbon fats in the treatment of diabetic ketosis, i, 536.
- Kahn, M.** See also **J. J. Hertz**.
- Kahn, O.** See **H. Branner**.
- Kailan, A.**, the action of penetrating radium rays on caffeine, i, 70.
- Kaiser, W.** See **J. von Braun**.
- Kaja, P.** See **R. Fricke**.
- Kalle & Co.**, *o*-aminobenzenecarboxylic acids, i, 1065.
aromatic dimethylamines, i, 1069.
derivatives of *p*-aminophenol, i, 1071.
vat dyes, i, 1078.
- Kamerman, P.** See **H. H. Green**.
- Kameyama, N.**, heat of formation of calcium cyanamide, i, 1050.
behaviour of calcium cyanamide when heated in nitrogen at high temperatures, i, 1051.
electrolysis of aqueous solutions of cyanamide, i, 1174.
- Kamon, J.** See **Y. Uyeda**.
- Kanao, S.** See **E. Fourneau**, and **H. Leuchs**.
- Kanda, S.**, bioluminescence. V. Luciferin of *Cypridina hilgendorffii*, i, 1372.
- Kann, E.** See **M. Bergmann**.
- Kanov, F.** See **N. S. Kurnakov**.
- Kaplansky, S.** See **V. Gulevitch**.
- Kappeler, M.** See **M. Battagay**.
- Kapsinov, R.**, test for bile pigments in urine, bile, and blood-serum, ii, 795.
- Kapur, S. N.** See **R. Falck**.
- Kara-Michailova, E.**, and **H. Pettersson**, brightness of scintillations from H-particles and from α -particles, ii, 380.

- Karczag, L.**, and **L. Paunz**, electropy. VII. Excretion of electropic dyestuffs and carbinols, i, 688.
- Karelitz, S., jun.** See **F. P. Underhill**.
- Kariyone, T.**, **K. Atsumi**, and **M. Shimada**, constituents of *Milletia Taiwaniana*, Hayata, i, 251.
- Kariyone, T.**, and **Y. Kimura**, catalytic reduction of aldehyde acetals, i, 52.
- Nelson's method of determining ascaridole, ii, 574.
- Kariyone, T.** See also **Y. Asahina**.
- Karl, A.**, and **S. Lombard**, determination of radium in natural titano-niobates, ii, 59.
- Karpen, V.**, equilibrium in the liquid-saturated vapour system, heat of vaporisation, law of rectilinear diameter, and molecular attraction, ii, 301.
- solution and molecular attraction, ii, 301.
- constitution of solids, ii, 302.
- electromotive forces of cells and molecular attraction, ii, 316.
- Karrer, P.**, the configuration of amino-acids. II., i, 151.
- Karrer, P.**, **W. Fioroni**, **R. Widmer**, and **H. Lier**, saponins. I. The sapogenin of the white soapwort (*Gypsophila sapogenin*), i, 1091.
- Karrer, P.**, and **C. Gränacher**, anhydrides of amino-acids and their derivatives, i, 1118.
- Karrer, P.**, **C. Gränacher**, and **A. Schlosser**, diketopiperazine derivatives, i, 212.
- Karrer, P.**, and **W. T. Haebler**, preparation of anilides of glycine, i, 722.
- Karrer, P.**, **E. Horlacher**, **F. Locher**, and **M. Giesler**, proteinogenous amino-alcohols and cholines. III., i, 168.
- Karrer, P.**, and **W. Klarer**, optically active $\alpha\beta$ -dibromopropionic and $\alpha\beta$ -dichloropropionic acids, i, 1281.
- Karrer, P.**, and **K. Nishida**, polysaccharides. XXV. Methylation products of reserve cellulose (lichenin), i, 501.
- Karrer, P.**, **A. P. Smirnov**, **H. Ehrensperger**, **J. van Slooten**, and **M. Keller**, toxins. I. Ricin. i, 690.
- Karrer, P.**, and **M. Staub**, polysaccharides. XXVI. Cleavage of lichenin into dextrose, i, 712.
- polysaccharides. XXVIII. Reserve cellulose (lichenin), i, 1288.
- polysaccharides. XXVII. Lichenase, i, 1382.
- Karrer, P.**, **M. Staub**, and **B. Joos**, polysaccharides. XXIII. Separation of lichenase into constituent enzymes, i, 471.
- Karrer, P.**, **M. Staub**, and **J. Staub**, polysaccharides. XXIV. The occurrence of lichenin (reserve cellulose) in lichens and other plants, i, 373.
- Karrer, P.**, **M. Staub**, **A. Weinhausen**, and **B. Joos**, polysaccharides. XXII. Lichenase and reserve cellulose (lichenin), i, 471.
- Karrer, P.**, **A. Widmer**, and **J. Staub**, reaction of acetohalogen-sugars with tertiary bases, i, 713.
- Karsen, A.** See **N. H. Kolkmeijer**.
- Karunakar, P. D.** See **S. A. Waksman**.
- Karwat, E.**, vapour pressure of solid hydrogen chloride, methane, and ammonia, ii, 822.
- Karwat, E.** See also **A. Eucken**.
- Kasai, R.** See **A. Schaarschmidt**.
- Kasancev, A. A.**, influence of nitric acid on the solubility of nitrates in water, ii, 755.
- Kasarnowsky, J.**, amphoteric elements, ii, 151.
- tellurous acid as a base, ii, 544.
- Kassner, G.**, catalytic oxidation of ammonia to nitrous gases and nitric acid, ii, 604.
- Kassner, H. C.**, histological and chemical examination of the seeds of *Ipomœa hederacea*, Jacquin, and of other species of *Ipomœa*, i, 815.
- Kato, J.** See **G. Kita**.
- Kato, N.** See **L. Pincussen**.
- Katscher, E.** See **K. Fuchs**.
- Katz, J. R.**, property of swelling by substances; production of fibre diagrams by X-ray spectroscopy, ii, 652.
- Kauffmann, H.** [with **E. Laemle**], the mode of action of auxochromes, i, 37.
- Kauffmann, A.**, preparation of acylapocincholoiponitriles, i, 1101.
- Kauffmann, H. P.**, and **C. Fuchs**, the saponins of the sarsaparilla root, i, 196.
- action of metals on acid chlorides in presence of ether, i, 961.
- Kauffmann, H. P.**, and **P. Gaertner**, titrations with free thiocyanogen, i, 840.
- Kauffmann, H. P.**, and **J. Liepe**, chlorides of thiocyanogen, i, 839.
- Kauffmann, H. P.**, and **J. Liepe** [with **M. Thomas**], additive reactions of thiocyanogen, i, 209.

- Kaufmann, H. P., and W. Mohnhaupt**, acetylene condensations. II. The theory of the formation of cuprene, i, 130.
- Kaufmann, H. P., and M. Thomas**, substituted salicylic acids. IV., i, 964.
- Kaufmann, H. P., and H. Voss** [with *W. Dähnert*], substituted salicylic acids. III. The reaction of γ -dicarboxyl chlorides with sodium salicylate, i, 176.
- Kaufmann, H. P., and G. Wolff**, keto-enolic tautomerism. II. The combined application of chemical methods to the estimation of enols, i, 136.
- keto-enolic tautomerism. III. Determination of enols by titration with thiocyanogen, i, 835.
- Kaufmann, W. E., and R. Adams**, platinum oxide as a catalyst in the reduction of organic compounds. IV. Reduction of furfuraldehyde and its derivatives, i, 197.
- Kaupp, E.** See *R. Glocker*.
- Kautsky, H., and G. Herzberg**, constitution of siloxen, ii, 852.
- Kautsky, H., and H. Thiele**, reactions of siloxen with halogen compounds, ii, 674.
- Kawaguchi, T.**, manufacture of G-acid [β -naphthol-6:8-disulphonic acid], using fuming sulphuric acid, i, 637.
- Kawamura, T.** See *C. A. Kraus*.
- Kay, H. D.**, changes in the phosphorus partition in human blood during ammonium chloride acidosis, i, 1364.
- Kay, H. D., and H. S. Raper**, mode of oxidation of fatty acids with branched chains. III. The fate in the body of α -methylcinnamic acid, β -phenylisobutyric acid, and γ -phenylisovaleric acid, i, 585.
- Kay, H. D., and R. Robison**, possible significance of hexosephosphoric esters in ossification. III. Action of the bone enzyme on the organic phosphorus compounds in blood, i, 904.
- rôle of phosphates in carbohydrate metabolism. I. Action of the muscle enzyme on the organic phosphorus compounds of blood. II. Effect of insulin administration on the distribution of phosphorus compounds in blood and muscle, i, 1368.
- Kay, H. D., and S. S. Zilva**, the alleged specific colour reaction for the anti-scorbutic factor, i, 346.
- Kaye, G. W. C.** See *I. Backhurst*.
- Kaye, M., and D. J. Lloyd**, biochemistry of skin and the chemical basis of skin swelling, i, 1378.
- Kayser, E.**, formation of pyruvic acid and ethyl alcohol from calcium lactate by yeasts, i, 917.
- Kayser, E., and H. Delaval**, radio-activity and nitrogen-fixing bacteria, i, 1016.
- wine yeasts, i, 1154.
- Kayser, L.**, hydrolysis of quadrivalent titanium sulphate solutions as the basis of a separation of titanium and aluminium in solution in sulphuric acid, ii, 704.
- Keane, J.** See *H. Ryan*.
- Kearney, M. B.**, fluorescence of aesculin solutions, ii, 370.
- Keegan, J. J.** See *G. H. Moates*.
- Keeley, T. C.** See *C. H. Bosanquet*.
- Keen, B. A.**, moisture relationships in an ideal soil, i, -819.
- Keeser, E.**, adsorption and the distribution of drugs in the organism. III., i, 460.
- Kehrmann, F.**, colour and constitution. IX., i, 1326.
- Kehrmann, F.** [with *A. van Baerle*], new syntheses in the quinoneimide dye group. I. Syntheses with 1-chloro-2:4-dinitronaphthalene, i, 212.
- Kehrmann, F.** [with *B. Cordone*], new syntheses in the quinoneimide dye group. IV. The colour of the simple quinoneimines, i, 214.
- Kehrmann, F., and C. Buffat**, some colouring matters derived from bidiphenylenethylene, i, 158.
- new syntheses in the quinoneimide dye group. II. Steric influence in the condensation of hydroxy-quinones with *o*-diamines, i, 213.
- Kehrmann, F., and S. Hempel**, colour of azo-compounds and their salts, i, 674.
- Kehrmann, F., and G. Jequier**, the constitution of Weselsky and Benedict's dinitroquinol methyl ether, i, 165.
- Kehrmann, F., and W. Klopfenstein**, the action of nitric acid on quinol diacetate, i, 165.
- new syntheses in the quinoneimide dye group. III. Syntheses of induline-3*B* and -6*B*, i, 213.
- Kehrmann, F., and M. Sandoz**, determination of the constitutional formulæ of colouring matters from their absorption spectra. V., i, 215.
- Keimatsu, S.**, moniodo-derivatives of *o*-nitrophenol. I., i, 1059.
- Keiner, L.** See *B. Helferich*.

- Keitel, K.** See *H. Schmalfuss*.
- Keith, E. B.** See *W. D. Harkins*.
- Kekre, M. G., J. J. Sudborough, and H. E. Watson,** production of acetone from acetates and acetic acid, i, 940.
- Kelber, C.,** catalytic hydrogenation of organic compounds with common metals at the temperature of the laboratory. VI. Influence of oxygen on nickel catalysts; influence of water on nickel catalysts at elevated temperatures, temperature of reduction, and activity, ii, 243.
- catalytic hydrogenation of organic compounds with common metals at the temperature of the laboratory. VII. Hydrogenations with elementary nickel in the absence of oxygen, ii, 244.
- Kellaway, C. H., and T. A. Hughes,** influence of insulin on normal metabolism in man, i, 1017.
- Keller, M.** See *P. Karrer*.
- Kellermann, K.** See *F. Weigert*.
- Kelley, W. P., and E. E. Thomas,** removal of sodium carbonate from soils, i, 926.
- Kelley, W. P.** See also *A. B. Cummins*.
- Kelly, W. J.,** determination of distribution of particle size, ii, 830.
- Kelly, W. J., and K. B. Ayers,** solubility of sulphur in caoutchouc, i, 409.
- Kelsey, E. B.,** amines. IX. Some chemical properties of aminoacetodiphenylamide, i, 958.
- Kemper, W.** See *T. Posner*.
- Kendall, J.,** separation of isotopes, ii, 812.
- Kenngott, E.** See *T. Curtius*.
- Kenny, T.** See *H. Ryan*.
- Kent, C. V.,** the free electron characteristics of sodium-potassium alloys, ii, 106.
- Kenyon, J., and J. W. Barnes,** dependence of rotatory power on chemical constitution. XXIII. The normal aliphatic ethers of *d*- γ -nonanol, i, 934.
- Keppler, H.** See *P. W. Neber*.
- Kerb, J., and E. Kerb-Etzdorf,** physiological behaviour of glucosan, i, 445.
- Kerb-Etzdorf, E.** See *J. Kerb*.
- Kern, E. J.** See *J. A. Wilson*.
- Kerner, W. R.** See *J. B. Conant*.
- Kerr, C. A.** See *G. G. Henderson*.
- Kerr, R. H.** See *A. D. Holmes*.
- Kerr, R. W. E.** See *J. M. Nelson*.
- Kerstein, H., and R. Hoffmann,** production of thiocyanogen by electrolysis of alkali thiocyanates, i, 717.
- Kessler, K.** See *R. Weinland*.
- Kesting, W.,** hydrazidicarbonazide and its formation as by-product of the diazotisation of carbohydrazide, i, 1175.
- Keyes, F. G.,** evidence of association in carbon dioxide from the Joule-Thomson effect, ii, 653.
- Keyes, F. G., and J. A. Beattie,** calorimeter for specific heats and heats of vaporisation, ii, 669.
- Kharasch, M. S., and L. Chalkley, jun.,** factors affecting the stability of mercurials and the mercurisation of substituted phenylammonium salts, i, 777.
- Kharasch, M. S., and F. W. Staveley,** behaviour of mercuric salts of organic acids towards heat, i, 154.
- Kiderlen, E.** See *J. Meisenheimer*.
- Kidner, C. A.** See *S. Dushman*.
- Kiesel, A.,** nitrogenous substances in ripening rye ears, i, 698.
- Kiess, C. C., and H. K. Kiess,** analysis of arc spectrum of titanium, ii, 510.
- Kiess, C. C.** See also *W. F. Meggers*.
- Kiess, H. K.** See *C. C. Kiess*.
- Kilner, E.** See *H. H. Hodgson*.
- Kimball, C. P., and J. R. Murlin,** aqueous extracts of pancreas. III. Some precipitation reactions of insulin, i, 448.
- Kimura, K.** See *M. Tsujimoto*.
- Kimura, M., and G. Nakamura,** broadening of spectral lines caused by increased current density and their Stark effects, ii, 799.
- self-reversal of the lines H^{α} and H^{β} of hydrogen, ii, 799.
- Kimura, Y.** See *T. Kariyone*.
- Kindler, K., O. Giese, and A. Isberg,** electrochemical reductions in acid solution, i, 731.
- King, A. M.** See *J. W. McBain*.
- King, A. S.,** electric furnace spectrum of titanium in the ultra-violet, ii, 638.
- King, C. G., and A. Lowy,** derivatives of *p*-nitrobenzaldehyde. II., i, 646.
- King, E.** See *C. Bülow*.
- King, H.,** stereoisomerism and local anæsthetic action in the β -eucaine group; resolution of β - and *iso*- β -eucaine, i, 311.
- King, H. J. S.,** chromammines. I. Salts of nitro- and other dyes, i, 1060.
- Kinne, G.** See *E. Koenigs*.
- Kinney, C. R.** See *H. Gilman*.
- Kinney, E. M.** See *P. G. Shipley*.
- Kino, K.** See *G. Kita, and T. Mazume*.
- Kionka, H., and P. Hirsch,** alcohol. I. Determination of ethyl alcohol in blood, i, 1366.

- Kiplinger, C. C.**, method for determining the approximate index of refraction of liquids with a common microscope, ii, 402.
- Kircher, A.**, and **F. von Ruppert**, determination of arsenic in organic compounds, ii, 59.
- Kirchhof, F.**, constitution and heat of combustion, ii, 240.
- Kirchhof, F.**, and **O. Matulke**, heat of combustion of natural and "sulphuric acid" caoutchouc, i, 1213.
- Kirchrath, H.** See **A. Schönberg**.
- Kirner, W. R.** See **J. B. Conant**.
- Kirpitschewa, W.** See **A. Joffé**.
- Kirsch, G.**, and **H. Pettersson**, artificial disintegration of atoms, ii, 227, 380.
- Kirschner, F.**, the nickel-dimethylglyoxime reaction by reflected illumination, ii, 205.
- Kirssanov, A. W.** See **A. E. Tschitschibabin**.
- Kirst, W.** See **C. Schall**.
- Kiss, A.**, the radiation hypothesis of the velocity of chemical reaction. II. Theory and experiment in gas reactions, ii, 163.
catalysis in homogeneous gas reactions. II. Catalysis of nitrosyl chloride formation by nitrogen peroxide, ii, 170.
- Kiss, A.**, and **L. Demény**, termolecular gas reactions. I. Mechanism of the formation of acetic acid from acetaldehyde and oxygen, i, 484.
- Kisser, J.**, use of picrolonic acid for the micro- and histological detection of calcium, ii, 124.
- Kistiakowsky, W.**, heat of vaporisation and some equations which determine the properties of non-associated liquids, ii, 19.
- Kita, G.**, **K. Asami**, **J. Kato**, and **R. Tomihisa**, preparation of acetone-soluble cellulose acetate, i, 945.
- Kita, G.**, and **T. Mazume**, hydrogenation of fats. I. Influence of various substances on the nickel catalyst, ii, 100.
- Kita, G.**, **T. Mazume**, and **K. Kino**, dehydrogenating action of nickel-copper catalysts, i, 1032.
- Kitamura, N.** See **E. Mangold**.
- Kittler, C.** See **K. W. Rosenmund**.
- Klapproth**, volumetric determination of potassium as hydrogen tartrate, ii, 701.
- Klarer, W.** See **P. Karrer**.
- Klarmann, E.**, Henry's law as applied to aqueous ammonia solutions and the hydrolysis of ammonium salts, ii, 176.
- Klarmann, E.** See also **E. Abderhalden**.
- Klason, P.**, lignin-content of spruce wood, i, 148.
proposed definition of "cellulose," i, 1289.
- Kleebeck, H.** See **R. Fricke**.
- Klees, H.** See **H. Gault**.
- Klein, A.** See **A. Klemenc**.
- Klein, (Mlle.) A.**, relation between the rate of stirring and the reaction velocity in heterogeneous systems, ii, 745.
decomposition of liquid sodium amalgam in aqueous solutions, ii, 756.
- Klein, (Mlle.) A.** See also **K. Jabczyński**.
- Klein, E.** See **A. L. Hughes**.
- Klein, G.**, and **A. Limberger**, the sulphur cycle in soil; (the biology of thiosulphate bacteria), i, 247.
- Klein, G.**, and **K. Pirschle**, detection and distribution of phytosterols in latex, i, 355.
- Klein, O.**, simultaneous action of crossed electric and magnetic fields on the hydrogen atom, ii, 281.
- Kleitman, N.**, the physiology of sleep. I. The effects of prolonged sleeplessness on man, i, 116.
- Klemenc, A.**, kinetic behaviour of mixtures of isomeric nitrophenols on reduction with stannous chloride, i, 383.
- Klemenc, A.** [with **A. Klein**], the kinetic behaviour of mixtures of isomeric nitrophenols in the reduction with stannous chloride, i, 36.
- Klemenc, A.**, and **K. Muha**, determination of the relative proportions of nitric oxide and nitrogen peroxide in a mixture, ii, 498.
- Klemenc, A.**, and **W. Remi**, viscosity coefficients of nitric oxide and propane and their mixtures with hydrogen, ii, 522.
- Klemm, W.** See **W. Biltz**.
- Klemme, C. J.** See **J. B. Ekeley**.
- Klenk, E.** See **P. Brigl**.
- Kleyn, D.** See **E. H. Buchner**.
- Kline, E.** See **W. R. Orndorff**.
- Kling, A.**, and **A. Lassieur**, detection of methyl alcohol in presence of ethyl alcohol, ii, 428.
detection and determination of tartaric acid, ii, 573.
- Kling, A.**, and **(Mme.) A. Lassieur**, separation of aluminium and iron from zinc, manganese, and nickel by the basic acetate method, ii, 502.
- Klingenfuss, M.**, iodometric determination of magnesium as magnesium ammonium arsenate, ii, 702.
- Klinger, Z.** See **J. Weichherz**.

- Klisiecki, L.**, and **E. Sucharda**, derivatives of 1:3:8-benzotriazine and the preparation of 2-aminonicotinic anhydride, i, 883.
- Klissianis, N.** See **L. Pincussen**.
- Klopfenstein, W.** See **F. Kehrmann**.
- Klopstock, F.**, adsorption of the complement by dyes, ii, 833.
- Klossmann, M.** See **P. Pfeiffer**.
- Klotz, A.** See **L. Blum**, and **A. Hirth**.
- Kluyver, A. J.**, occurrence of catalase in micro-organisms, i, 1147.
- Knaggs, I. E.**, relation between crystal structure and constitution of carbon compounds, II. Crystallography of further simple substitution products of methane, i, 1050.
- Knaus, W.** See **R. Müller**.
- Knecht, E.** [with (*Miss*) **E. Hibbert**], titanous salts as reducing agents, i, 1183.
- Knecht, E.**, and (*Miss*) **E. Hibbert**, direct determination of dextrose and other carbohydrates, ii, 875.
- Knecht, E.**, and **F. P. Thompson**, a quantitative study of the interaction of dextrose and phenylhydrazine, i, 264.
- Knehans, K.** See **F. Sauerwald**.
- Kniatowna, J.**, direct amination of anthraquinone, i, 655.
- Knibbs, N. V. S.**, gas film theory of overvoltage, ii, 600.
- Knight, H. H.** See **L. S. Palmer**.
- Knight, N.** See **H. S. Fries**.
- Knipping, H. W.**, and **H. L. Kowitz**, determination of the protein fractions in serum and plasma, ii, 636.
- Knobel, M., P. Caplan**, and **M. Eiseman**, effect of current density on overvoltage, ii, 88.
- Knoevenagel, E.** [with **H. Bähr**, and **E. Wagner**], keto-anils. V. The formation of quinolines from ketones and aromatic amines, i, 205.
- Knop, J.**, the gravimetric ratio of antimony to antimony tetroxide, ii, 54.
- diphenylamine as indicator in the titration of iron with dichromate solution, ii, 351.
- Knorr, C. A.**, the properties of chemical compounds and the arrangement of the electronic orbits in their molecules, ii, 34.
- Knowles, H. B.** See **G. E. F. Lundell**.
- Knuth, C. A.** See **C. H. Milhigan**, and **A. S. Richardson**.
- Kobel, M.** See **M. Bergmann**, and **R. O. Herzog**.
- Koch, A.** See **R. Pummerer**, and **G. Tammann**.
- Koch, F. C.**, and **T. L. McMeekin**, direct nesslerisation micro-Kjeldahl method and a modification of the Nessler-Folin reagent for ammonia, ii, 871.
- Koch, J.** See **K. von Auwers**.
- Kochmann, E. L.** See **H. W. Underwood, jun.**
- Köcher, H.** See **A. Windaus**.
- Koechig, I.** See **A. P. Briggs**, and **E. Bonzoni**.
- Kögl, F.** See **H. Fischer**.
- Köhler, A.** See **K. Lindner**.
- Koehler, A. E.**, rates of reduction and oxidation of blood, i, 440.
- uric acid excretion, i, 1257.
- Köhler, E.** See **K. Fries**.
- Köhler, G.** See **S. Odén**.
- Köhler, Thaddäus.** See **H. Biltz**.
- Köhler, Theodor.** See **A. Franke**.
- Koehler, W. A.**, and **J. H. Mathews**, heat of wetting of lead sulphate, ii, 664.
- Köhn, M.** See **H. Remy**.
- König, J.** See **W. Manchot**.
- König, T.** See **E. Weitz**.
- König, W.** [with **E. Wagner**], indoleninocyanines [indocyanines], i, 669.
- König, W.**, and **Joh. Müller**, mechanism of diazo-coupling reactions. IV. Azo-dyes from 2-methylenetrialkylindolines, i, 420.
- König, W.**, and **E. Wagner**, some derivatives of 1:8-naphthasultam, i, 997.
- Koenigs, E.**, and **K. Freter**, nitration of 4-hydroxypyridine, i, 990.
- Koenigs, E., G. Kinne**, and **W. Weiss**, diazotisation and nitration of 4-aminopyridine, i, 988.
- Koenigs, E., M. Mields**, and **H. Gurlt**, products of the nitration of 4-aminopyridine, i, 989.
- Koessler, K. K.**, and **M. T. Hanke**, proteinogenous amines. XVI. Excretion of iminazoles in the urine, i, 795.
- XXI. intestinal absorption and detoxication of histamine in the mammalian organism, i, 806.
- Koessler, K. K.** See also **M. T. Hanke**.
- Koester, H.** See **B. Helferich**.
- Köstermann, E.** See **E. Ryschkewitsch**.
- Köszeg, F.**, disposal of fat in the organism, i, 634.
- Koetschau, R.**, and **W. Flemming**, oxidation of saturated hydrocarbons by ozone, i, 380.
- Kofler, L.**, and **O. Dafert**, saponin from *Gypsophila paniculata*, ii, 74.
- Kofler, L.**, and **H. Frauendorfer**, saponin of the primula root, i, 1216.
- Kofman.** See **Cluzet**.

- Koga, T.** the differentiation of animal and plant diastases, i, 107.
- Koga, T.** See also *J. Wohlgemuth*.
- Kohlberg, W.** See *A. Benrath*.
- Kohler, E. P.**, a new type of cyclic compound, i, 571.
- isooxazoline oxides*. II. Benzoyldiphenylisooxazoline oxide, i, 998.
- Kohler, E. P.**, and *C. F. H. Allen*, δ -ketonic nitriles and their relation to cyclic compounds. III., i, 855.
- Kohler, E. P.**, and *G. R. Barrett*, additive reactions of benzoylphenylacetylene, i, 744.
- isooxazoline oxides*. III. Triphenylisooxazoline oxide, i, 1239.
- Kohler, E. P.**, and *C. S. Dewey*, additive reactions of certain pentadienones. II. Addition of malonic esters, i, 746.
- Kohler, E. P.**, and *R. W. Helmkamp*, additive reactions of certain pentadienones, i, 745.
- Kohlhaas, W.** See *K. von Auwers*.
- Kohlhörster, W.**, measurements of the intensity and direction of the penetrating radiation [occurring in the earth's atmosphere], ii, 215.
- Kohli, S. J.** See *N. A. Yajnik*.
- Kohlschütter, V.**, ultra-microscopic electrode phenomena, ii, 538.
- Kohlschütter, V.**, and *P. Scherrer*, polymorphous forms of lead oxide, ii, 338.
- Kohlschütter, V.**, and *F. Uebersax*, electrolytic crystallisation of lead, ii, 528.
- Kohn, G.** See *H. Pringsheim*.
- Kohn, M.**, and *L. Benczer*, the iron-cyanogen compounds, i, 20.
- ethylene and trimethylene ethers of quinol, i, 38.
- Koizumi, S.**, and *H. Ichinose*, valeric acid, i, 259.
- Koken, G.** See *W. Wislicenus*.
- Kolb, A.**, use of permutite in separating and determining ammonia in urine, ii, 699.
- Koldaeva, E.** See *N. Igarischev*.
- Kolkmeijer, N. H.**, *J. M. Bijvoet*, and *A. Karssen*, crystal structure of sodium chlorate, ii, 108.
- Koller, G.** See *E. Späth*.
- Koller, I.** See *H. Ohle*.
- Kollmann, G.**, determination of purine bases of foodstuffs, ii, 358.
- Kolossoy, A.** See *P. P. Fedotéev*.
- Kolthoff, I. M.**, a new qualitative test for sodium, ii, 60.
- the colorimetric determination of hydrocyanic acid as thiocyanate, ii, 75.
- Kolthoff, I. M.**, benzidine as a reagent, and as an indicator for specific oxidation-potential, ii, 121.
- diphenylcarbazine as a qualitative reagent for metals, ii, 124.
- the colorimetric determination of the hydrogen exponent of soil, ii, 199.
- application of potassium permanganate in oxidimetry, ii, 272.
- second dissociation constant of sulphuric acid, ii, 305.
- strength of the acid function of the oxygen acids of sulphur, ii, 305.
- influence of salts on the constants of the silver bromide and silver electrode, ii, 316.
- spontaneous decomposition of permanganate under various conditions, ii, 350.
- colorimetric determination of hydrogen-ion concentration by the wedge method, and the dissociation constants of some indicators, ii, 418.
- influence of colloids on the titration of chlorides by Volhard's method, ii, 420.
- titration of oxalic acid with permanganate, ii, 428, 573.
- titration of arsenious acid with permanganate, ii, 567.
- standardisation of permanganate with various substances, ii, 628.
- standardisation of permanganate by means of different materials, ii, 628.
- oxidation of nitrous acid, hydrazine, ammonia, and hypophosphite by means of permanganate, ii, 673.
- determination of sulphurous acid, thio-sulphate, and sulphide by means of permanganate, ii, 697.
- hydrostrychnine reagent for nitrites and nitrates, ii, 779.
- titration of manganous salts with permanganate, ii, 786.
- volumetric analysis of hydrazine by the iodine, bromate, iodate, and permanganate methods, ii, 871.
- Kolthoff, I. M.** [with *J. C. van Dijk*], standardisation of permanganate with ferrous ammonium sulphate, ii, 503.
- Kolthoff, I. M.**, and *M. J. van Cittert*, determination of sulphates in extremely dilute solutions by Hahn's method, ii, 421.
- Kolthoff, I. M.**, and *H. Hamer*, micro-chemical detection of cadmium and zinc as double pyridine compounds, ii, 785.
- detection of metals as double halides with pyridine, antipyrine, pyramidone, or aniline, ii, 873.

- Kolthoff, I. M., and N. Smit**, stability of permanganate solutions, ii, 350.
titration of ferrous iron with permanganate, ii, 786.
- Kolthoff, I. M., and O. Tomiček**, determination of chlorine by Volhard's method in presence of colloids, ii, 347.
replacement of iodine by ferric chloride in quantitative analysis, ii, 870.
- Kolthoff, I. M., and E. J. A. H. Verzyl**, double salt of zinc and caesium ferri-cyanides, i, 841.
application of the mercury electrode in the electrometric titration of halides, cyanides, sulphides, and thiosulphates, ii, 199.
the accuracy of the potentiometric titration of zinc with ferrocyanide, ii, 203.
titration of zinc by ferrocyanides of different metals, ii, 501.
- Kolthoff, I. M.** See also *E. J. A. H. Verzyl*.
- Komatsu, S.**, catalytic action. IV. A function of reduced copper, i, 531.
the Beckmann rearrangement. X., i, 657.
- Komatsu, S., and S. Kumamoto**, catalytic action. V. Catalytic reduction of α - and β -naphthyl methyl ethers, i, 637.
- Komatsu, S., and M. Kurata**, catalytic action. VI. Catalytic action of reduced copper on acid amides, i, 639.
the Beckmann rearrangement. XI. Catalytic action of reduced copper on *l*-menthoneoxime, i, 657.
catalytic action. VII. Catalytic action of reduced copper on acetaldehyde, i, 1042.
- Komatsu, S., and S. Kusumoto**, composition of Japanese petroleum. I., i, 502.
- Komatsu, S., B. Masumoto, and S. Kumamoto**, ultra-violet absorption spectra of some derivatives of naphthols, ii, 642.
- Komatsu, S., and N. Tanaka**, Japanese petroleum. II., i, 628.
- Komatsu, S., and M. Tanimura**, isolation of sucrose from mixtures of dextrose, lævulose, and sucrose, i, 713.
- Komm, E.** See *E. Abderhalden*.
- Kommarevsky, W.** See *N. D. Zelinski*.
- Komornicka, (Mme.) A.** See *K. Smoleński*.
- Konarsky, A.** See *B. Fetkenheuer*.
- Kondo, H., and T. Nakazato**, change of cotarnine and its derivatives by Ladenburg's reduction, i, 979.
- Kondo, H., and T. Sanada**, the constitution of matrine. III. and IV. Reaction between matrine and phosphorus pentachloride, i, 76.
- Kondo, H., and T. Ui**, Skraup's quinoline synthesis applied to 6-amino-coumarin, i, 87.
- Kondo, S.** See *H. Braun*.
- Kondratěv, V., and N. Semenov**, ionisation of salt vapours, ii, 291.
- Konek, F. von, and A. Loczka**, lecture experiment to demonstrate the chemical action of light, ii, 403.
- Kooy, J.** See *E. Cohen*.
- Kopetschni, E.**, 1-chloro-2-acylamido-anthraquinones, i, 1080.
- Kopfermann, H.**, sensitised fluorescence of lead and bismuth vapours, ii, 220.
- Koppejan, C. A.** See *B. van der Burg*.
- Koppel, I.**, separation of molybdic and tungstic acids, ii, 874.
- Korczynski, A.** [with *S. Namyslovski*], derivatives of azoimide, i, 1354.
- Korczynski, A., and S. Obarski**, some heterocyclic derivatives of substituted *o*-aminophenols, i, 315.
- Koref, F.** See *R. Gross*.
- Korenchevski, V.** See *S. S. Silva*.
- Kornfeld, G.**, theory of radiation transformation, ii, 213.
- Kornfeld, H.**, calculation of electrostatic potential and energy for di- and quadrupolar lattices, ii, 298.
- Kornfeld, L.** See *S. Gabriel*.
- Kosakewitsch, P. P.**, hydrolysis in stages and adsorption equilibrium, ii, 392.
- Koser, S. A.**, correlation of citrate utilisation by members of the colon-aerogenes group with other differential characteristics and with habitat, i, 1016.
- Kosian, M. M.** See *S. Bächer*.
- Kossel, A., and R. E. Gross**, preparation and determination of arginine, ii, 211.
- Kotz, A., and T. Steche**, stepwise oxidation of citronellol and geraniol, i, 703.
- Kotwal, Y. N.** See *G. J. Fowler*.
- Koubel, O.**, aromatic hydrocarbons of low-temperature tar, i, 954.
- Kovarik, A. F.**, number of γ -rays emitted per second from radium-*B* and -*C* in equilibrium with 1 g. of radium, and the number emitted per atom disintegrating, ii, 447.
- Kowitz, H. L.** See *H. W. Knipping*.
- Kraay, G. M.** See *J. P. Wibaut*.
- Kraemer, E. O.**, formation of manganese arsenate jellies, ii, 536.

- Kraemer, E. O.**, and **T. Svedberg**, formation of colloid solutions by electrical pulverisation in the high-frequency alternating current arc, ii, 830.
- Kraemer-Willenberg, H.** See *Ernst Müller*.
- Krahn, E.** See *R. O. Herzog*.
- Kramer, B.** See *J. Howland, J. B. Pincus*, and *L. Wilkins*.
- Kramer, M. M.** See *H. C. Sherman*.
- Kramers, H. A.**, quantum theory of dispersion, ii, 644.
- Kramers, H. A.** See also *N. Bohr*, and *J. A. Christiansen*.
- Krapup, I.** See *E. Biilmann*.
- Krase, H. J.**, and *J. Y. Yee*, mechanism and thermochemistry of the reaction between calcium carbide and nitrogen, ii, 758.
- Krase, H. J.** See also *J. Y. Yee*.
- Krassikov, S.** See *L. Tschugaev*.
- Krastelevsky, S.**, the colorimetric determination of cholesterol in blood-serum, ii, 127.
- Kratzer, A.**, terms of the (C+H) band spectra, ii, 366.
- Kraus, C. A.**, the radical theory, ii, 829.
- Kraus, C. A.**, and *C. C. Callis*, organo-metallic compounds. I. Introduction. II. Equivalent conductivity of tin trimethyl chloride in ethyl alcohol, i, 25.
- Kraus, C. A.**, and *W. N. Greer*, organo-metallic compounds. III. Compounds formed between tin alkyl halides and ammonia and the amines, i, 155.
- organo-metallic compounds. IV. Conductivity of tin trimethyl chloride in mixed solvents, i, 155.
- Kraus, C. A.**, and *C. B. Hurd*, equilibria in systems involving calcium, hydrogen, and nitrogen, ii, 26.
- Kraus, C. A.**, and *T. Kawamura*, reactions of strongly electropositive metals with organic substances in liquid ammonia solution. IV. Action of the alkali metals on triphenylmethyl and its compounds, i, 276.
- Kraus, C. A.**, and *W. W. Lucasse*, resistance-temperature coefficient of concentrated solutions of potassium in liquid ammonia and the specific conductivity of solutions of potassium in liquid ammonia at intermediate concentrations, ii, 13.
- Krause, E.**, intensely coloured sodium triphenylboryl, a remarkable analogue of sodium triphenylmethyl, i, 436.
- Krause, E.**, stable partial-valency compounds of triphenylboron, a contribution to the problem of the valency of boron, i, 777.
- lead tetrachloride, ii, 259.
- Krause, E.**, and *R. Pohland*, tin dicyclohexyl, hexacyclohexyldistannane, and other cyclohexyl compounds of tin, i, 579.
- Krause, H.**, formaldehyde compounds of simple amino-acids, i, 1290.
- distinction between α - and β -naphthol, ii, 630.
- Krauss, F.**, alkali ruthenates, ii, 196.
- Krauss, F.**, and *H. Kükenthal*, a new method for the preparation of soluble ruthenium compounds from ruthenium, ii, 196.
- ruthenium halides ii, 770.
- Krauss, F.**, and *D. Wilken*, osmium tetroxide. I. Valency of osmium in its tetroxide, ii, 772.
- Kraut, H.**, and *E. Wenzel*, enzyme adsorption. I. A contribution to the knowledge of "invertin" of Willstätter and his collaborators, i, 467.
- Kraut, H.** See also *R. Willstätter*.
- Krauter, H.** See *E. Glaser*.
- Krecke, R.** See *E. Wedekind*.
- Kredel, W.** See *J. von Braun*.
- Kremann, R.**, and *A. Brodar*, electrolytic conductivity of fused metallic alloys. II. Electrolysis of lead-bismuth alloys, ii, 724.
- Kremann, R.**, and *K. Dietrich*, the influence of substitution in the components of binary solution equilibria. XLII. The binary systems of succinimide with phenols, i, 36.
- the influence of substitution in the components of binary solution equilibria. XLIV. The binary equilibria of fenchone with phenols, i, 63.
- Kremann, R.**, *H. Ortner*, and *R. Markl*, electrolytic conductivity in fused metallic alloys. I. Electrolysis of antimony-zinc alloys, ii, 723.
- Kremann, R.**, and *K. Pogantsch*, the influence of substitution in the components of binary solution equilibria. XLIII. The binary systems of *m*-hydroxybenzaldehyde with phenols and nitro-compounds, i, 52.
- Kremer, E.** See *H. Biltz*.
- Kremers, R. E.**, the action of phenylhydrazine on pinene nitrosochloride, i, 194.
- Kremers, R. E.** See also *F. J. Bacon*, *R. C. Brown*, and *W. A. Demombreun*.

- Krepelka, H.**, revision of the atomic weight of aluminium. II. Analysis of aluminium chloride, ii, 763.
- Krestev, W.** See **K. Jellinek**.
- Kretschmann, H.** See **G. Heller**.
- Kreul, H. G.**, oxidation of ammonia to nitric acid, ii, 672.
preparation of carbon monoxide by means of the electric arc, ii, 755.
- Krings, W.** See **G. Tammann**.
- Krönig, W.**, thermal decomposition of some pure metallic acetates, i, 1031.
- Krönig, W.** See also **F. Fischer**.
- Kroll, F.** See **K. A. Hofmann**.
- Krollpfeiffer, F.**, anomalous splitting of ketimides, i, 184.
- Krollpfeiffer, F.**, and **H. Schultze**, ring closures from β -phenoxypropionic acids to chromanones, i, 411.
formation of hydroxyhydrindones from phenyl esters of β -halogenpropionic acids by heating with aluminium chloride, i, 524.
- Kronacker, P. G.**, action of sulphuric acid on some amino-acids and on the vinasse from the distillation of molasses, i, 838.
- Kronenberg, P.** See **K. A. Hofmann**.
- Kronig, R. de L.**, model of the helium atom, ii, 361.
change of conductance of selenium due to electronic bombardment, ii, 849.
- Krotkov, D.** See **N. S. Kurnakov**.
- Krüger, D.** See **F. Auerbach**.
- Krüger, H.** See **F. A. Henglein**.
- Krüger, O.** See **A. Benrath**.
- Krüger, W.** See **F. Rinne**.
- Kruegger, E.**, double refraction in moving fluids, ii, 511.
- Kubánek, F.** See **L. Cikánek**.
- Kubina, H.** See **A. Kutenacker**.
- Kubisch, G.** See **T. Sabalitschka**.
- Kucharenko, J. A.**, crystallisation of sucrose, i, 498.
- Kudrjavzeva, A.** See **A. Palladin**.
- Kühl, G.**, exchanges of the blood and the excretion of urobilin, i, 1373.
- Kühn, G.**, alcohol. II. Alcohol content of human blood in the fasting condition, and after ingestion of carbohydrates or of small amounts of alcohol, i, 1366.
- Kühn, W.** See **K. Jellinek**.
- Kühner, A.** See **H. Fischer**.
- Kükenthal, H.** See **F. Krauss**.
- Kulz, F.**, intensity of action on nerve-endings of various substituted quaternary aliphatic ammonium bases, i, 1012.
- Kürten, H.**, globulin and albumin coefficients of serum especially during pregnancy, i, 1125.
- Küster, W.**, methylethylmaleinimide, i, 948.
investigations of the blood of individual animals. III., i, 1125.
- Küster, W.**, and **H. Maurer**, a new synthesis of hæmamic acid, i, 202.
- Küster, W.**, and **H. Oesterlin**, individual blood researches. II., i, 1005.
porphyrins. VII. Dibromohæmatoporphyrin dimethyl ether, i, 1006.
- Küster, W.**, and **P. Schlack** [with **E. Erle**, and **W. Heess**], formation of pyrrole derivatives from amides of β -diketonic esters, i, 542.
- Kugelmass, I. N.**, buffer mechanism for the calcium-ion concentration and determination of calcium-ion buffer values, ii, 591.
- Kugelmass, I. N.**, and **C. Rothwell**, direct determination of secondary phosphate, ii, 275.
- Kugelmass, I. N.**, and **A. T. Shohl**, determination of the equilibria involving calcium-, hydrogen-, carbonate-, bicarbonate-, and primary, secondary, and tertiary phosphate-ions, ii, 235.
- Kuhn, F.** See **F. Fichter**.
- Kuhn, R.**, hydrolysis of starch by emulsin, i, 692.
influence of stereoisomeric sugars, non-hydrolysable carbohydrates, and glucosides on the efficiency of yeast invertase; specificity of enzymes. VI., i, 693.
- Kuhn, R.**, and **H. Sobotka**, comparison of hydrogen-ion and enzyme catalysis of certain sugars and glucosides, i, 711.
synthesis of amygdalin, i, 1330.
- Kuhn, R.** See also **R. Willstätter**.
- Kuhn, W.**, influence of temperature on the decomposition of ammonia by ultra-violet light, ii, 249.
- Kuiper, P.** See **H. I. Waterman**.
- Kulenkampff, H.** See **G. Joos**.
- Kullgren, K.**, primary products of the combustion of carbon, i, 601.
- Kulvarskaja, R.** See **A. Frumkin**.
- Kumamoto, S.** See **S. Komatsu**.
- Kunat, F.** See **K. Hess**.
- Kunft, J.**, detection of chlorine, bromine, and iodine in mixtures, ii, 562.
- Kunitz, M.**, valency rule and Hofmeister series in colloidal behaviour of proteins. III. Influence of salts on osmotic pressure, membrane potentials, and swelling of sodium gelatinates, ii, 461.

- Kunitz, M.** See also *J. Loeb*, and *J. H. Northrop*.
- Kunz, A.** See *G. Zemplén*.
- Kunz, J.**, and *E. H. Williams*, the photo-electric effect of caesium vapour, ii, 82.
- Kunz, J.** See also *J. Tykocinski-Tykociner*.
- Kunze, G.** See *A. Gutbier*.
- Kunzman, C. H.** See *C. Davisson*.
- Kupelwieser, E.**, detection of ferment processes conditioned by immunisation. I., i, 806.
- Kupelwieser, E.**, and *H. Wastl*, detection of ferment processes conditioned by immunisation. II., i, 806.
- Kurata, M.** See *S. Komatsu*.
- Kurnakov, N. S.** [with *D. Krotkov, M. Oksmann, N. Beketov, S. Perelmutter, F. Kanov*, and *J. Finkel*], internal friction and fusibility of binary systems, ii, 454.
- Kuroda, S.**, detection of toluene in organs and its distribution in the organism, i, 462.
- Kurtenacker, A.**, determination of tetrathionate by means of sulphite, ii, 497.
use of the aldehyde-bisulphite reaction in volumetric analysis, ii, 564.
- Kurtenacker, A.**, and *H. Kubina*, bromometric determination of thiocyanate, ii, 778.
determination of hydrazine and its derivatives, ii, 778.
- Kurtenacker, A.**, and *R. Neusser*, the determination of hydroxylamine with permanganate, ii, 201.
oxidation of hydroxylamine, ii, 249.
peculiar catalytic decomposition of hydroxylamine, ii, 250.
- Kusenack, W.** See *H. Fringsheim*.
- Kusumoto, S.** See *S. Komatsu*.
- Kutscher, F.** See *D. Ackermann, E. Berlin*, and *F. Holtz*.
- Kutznier, W.**, application of the law of probability to the radioactive emission of polonium, ii, 226.
- Kutznier, W.** See also *O. von Baeyer*.
- Kuwada, S.** See *Y. Asahina*.
- Kvapil, K.** See *A. Némec*.
- Kyrimis, T.** See *E. Sakellarios*.
- L.
- Laar, J. J. van**, the increased valency-affinity, \sqrt{A} , of the metallic ion in fused salts, ii, 517.
vapour pressure of solid carbon, ii, 519, 821.
- Labbe, M.**, *H. Bith*, and *F. Nepveux*, titration of organic acids (in urine), ii, 707.
- Labernadie, V.** See *E. Wollman*.
- Labouehère, A.** See *F. Schaaf*.
- Lacassagne, A.**, and (*Mme.*) *J. S. Lattès*, auto-histo-radiographic method for the detection in organs of injected polonium, i, 347.
- Lacassagne, A.** See also (*Mme.*) *J. S. Lattès*.
- Lachartre, M.**, ammonium vanadates, ii, 409.
- Lachman, A.**, the benzil rearrangement. V. Cannizzaro's reaction, i, 292.
equilibrium between benzaldehyde and benzoin, i, 649.
the benzil rearrangement. VI., i, 653.
the Beckmann rearrangement, i, 861.
- Lacroix, A.**, analcitic lavas of North Africa, and classification of lavas containing analcite, ii, 269.
nephelitic syenites of the Los Islands (French Guinea), ii, 494.
meteoric iron from the desert of Adrar in Morocco (Mauretania), ii, 693.
- Lacroix, J.**, preparation of 3:3'-diaminodiphenylsulphone by electrolytic reduction of 3:3'-dinitrodiphenylsulphone, i, 279.
- Lacy, S. A. de**, apparatus for extraction and solvent recovery, ii, 418.
- Ladd, W. S.** See *E. J. Bigwood*, and *H. B. Richardson*.
- Laemle, E.** See *H. Kauffmann*.
- Laer, M. H. van**, and *R. Duvinage*, the evolution of phosphorus during germination, i, 250.
- Laer, M. H. van**, and *A. Masschelein*, development of pentosans in barley during germination, i, 476.
- Laffitte, P.**, propagation of the detonation wave, ii, 399.
spectroscopy of explosions, ii, 580.
- Laing, M. E.**, movement in an electrical field; migration, electrophoresis, and electro-osmosis of sodium oleate, i, 937.
- Laing, M. E.**, and *J. W. McBain*, jellies, as contrasted with gels and curds; soaps in dry alcohol, ii, 593.
- Lamb, A. B.**, *A. W. Phillips*, and *R. K. Carleton*, reaction between carbon monoxide and iodic acid in aqueous sulphuric acid, ii, 853.
- Lamberz, W.** See *A. Benrath*.
- Lambourne, H.**, derivatives of methylstannonic acid. II., i, 1291.

- LaMer, V. K., and T. R. Parsons,** application of the quinhydrone electrode to electrometric acid-base titrations in the presence of air, and the factors limiting its use in alkaline solution, ii, 55.
- LaMer, V. K., and E. K. Rideal,** the influence of hydrogen concentration on the autoxidation of quinol; a note on the stability of the quinhydrone electrode, i, 281.
- LaMer, V. K.** See also *J. N. Brönsted.*
- Lammert, O. M.** See *J. L. R. Morgan.*
- Lamparter, W.** See *J. Meisenheimer.*
- Lamson, P. D., G. H. Gardner, R. K. Gustafson, E. D. Maire, A. J. McLean, and H. S. Wells,** the pharmacology and toxicology of carbon tetrachloride, i, 245.
- Lamson, R. W.** See *J. C. Cadora.*
- Landé, A.,** relativity doublets in *X-ray* spectra, ii, 511.
absolute interval of optical doublets and triplets, ii, 711.
- Landé, A., and W. Heisenberg,** term structure of multiplets, ii, 710.
- Landesen, G.,** [substitute for ground joints in vacuum technique], ii, 245.
- Landesen, G.** See also *A. Mickwitz.*
- Landmann, H.** See *E. Fromm.*
- Landschütz, P.** See *F. Sauerwald.*
- Landsteiner, K., and M. Heidelberger,** differentiation of oxyhæmoglobins by means of mutual solubility tests, i, 103.
- Lane, J. H., and L. Eynon,** determination of sugar in urine by means of Fehling's solution with methylene-blue as internal indicator, ii, 707.
- Lang, R.,** the formation of periodate by the action of permanganate on various iodine compounds, ii, 166.
the reaction between solutions of complex cupric salts and potassium cyanide, ii, 184.
iodometric determination of ferri- and ferro-cyanides, ii, 792.
- Lange, E.** See *W. Borsche.*
- Lange, H.,** significance of ions in muscle function. III. Influence of various kations on the chemical activity of striated frog muscle, i, 1138.
- Lange, H.** See also *G. Embden, and J. Meisenheimer.*
- Lange, W.** See *W. Traube.*
- Langer, P.** See *K. W. Rosenmund.*
- Langjahr, C.** See *M. Battegay.*
- Langlais, P., and J. Goby,** essence of iris, i, 1153.
- Langle.** See *E. Lesné.*
- Langwill, B.,** acids produced by hæmolytic and non-hæmolytic *Streptococci*, i, 1014.
- Lankelma, H. P.** See *L. C. Raiford.*
- Lantz, R.** See *Société Anonyme des Matières Colorantes et Produits Chimiques de St. Denis.*
- Laporte, C. E.,** colorimetric determination of small quantities of bismuth, ii, 68.
- Laporte, O.,** arrangement of the vanadium lines in multiplets, ii, 135.
spectrum of iron, ii, 364.
multiplets in the spectrum of vanadium, ii, 435.
- Lapparent, J. de,** mineralogical constitution of bauxites and the limestones found in contact with them, ii, 269.
- Lapworth, A.** See *R. D. Haworth.*
- Laquer, F., and K. Griebel,** degradation of carbohydrates in striped muscle. IV. Biochemistry of α - and β -glucose, i, 1129.
- Laqueur, E.** See *I. Snapper.*
- Larbig, K.** See *J. von Braun.*
- Larose, P.** See *F. M. G. Johnson.*
- Larsen, E. A.** See *W. L. Lewis.*
- Larson, A. T.,** ammonia equilibrium at high pressures, ii, 331.
- Larson, A. T., and R. L. Dodge,** ammonia equilibrium, ii, 104.
- Lasarev, P.,** velocity of photochemical reactions under the action of light the intensity of which is periodic, ii, 81.
physical theory of chemical reactions, ii, 320.
relations between the atomic concentration and the mechanical, thermal, and optical constants of the elements, ii, 517.
- Lascary, L.,** surface tension of soap solutions, ii, 236.
- Lasnitzki, A., and L. F. Loeb,** adsorption by hydrophilic colloids, ii, 462.
- Lassé, R.** See *W. A. Roth.*
- Lassieur, A.,** arrangement for electrolysis by graded potentials, ii, 15.
rapid electro-analytical separation of silver, copper, and bismuth by means of graduated potentials, ii, 568.
- Lassieur, A.** See also *A. Kling.*
- Lassieur, (Mme.) A.** See *A. Kling.*
- László, H. de.** See *V. Henri.*
- Latshaw, W. L., and E. C. Miller,** elementary composition of the corn [maize] plant, i, 1020.
- Latshaw, W. L.** See also *C. O. Swanson.*
- Latimer, W. M.,** ionisation of salt vapours, ii, 85.

- Lattès, (Mme.) J. S., and A. Lacassagne**, physico-chemical technique for detection of polonium injected into organs, i, 461.
determination, in different organs, of polonium injected into an organism, i, 590.
- Lattès, (Mme.) J. S.** See also **A. Lacassagne**.
- Lau, E.**, fine structure of certain spectral lines, ii, 282.
- Lauch, K.**, optical constants of metallic films obtained by cathodic sputtering, ii, 372.
- Laue, M. von**, theory of emission of positive ions and electrons from glowing metals, ii, 223.
- Laufberger, W.**, hyperglycæmia after parenteral administration of protein, i, 1366.
- Laufberger, W., and J. A. Šefčík**, stimulus of food on intermediary metabolic processes. I., i, 683.
- Lausberg, F.** See **P. Lipp**.
- Lauterbach, F.** See **F. Rosenthal**.
- Lawaczek, H.**, dynamics of phosphoric acid in the blood, i, 680.
- La Wall, C. H.**, detection of methyl alcohol in ethyl alcohol, ii, 69.
detection of methyl alcohol in presence of ethyl alcohol, ii, 279.
glycerol as a disturbing factor in testing for methyl alcohol in ethyl alcohol, ii, 352.
- Lawrence, J. V., and J. A. Harris**, wet oxidation and modified Volhard method for the determination of chlorides in plant-tissue fluids, ii, 624.
- Lawrence, J. V.** See also **J. A. Harris**.
- Lawrence, Z. W.** See **J. A. Harris**.
- Lawson, R. W.**, anomalous emission of α -particles from polonium, ii, 587.
- Lawson, R. W.** See also **V. F. Hess**.
- Lawson, W., W. H. Perkin, jun., and R. Robinson**, harmine and harmaline. VII. Synthesis of apharmine and of certain carboline and copyrine derivatives, i, 562.
- Lawson, W.** See also **R. Robinson**.
- Lax, E., and M. Pirani**, light radiation and total radiation of tungsten, ii, 367.
- Lay, J. T.** See **C. B. Bazzoni**.
- Layraud, E.**, preparation of unsymmetrical *CC*-dialkylbarbituric acids, i, 92.
preparation of new salts of *CC*-disubstituted barbituric acids, i, 668.
unsymmetrical *CC*-dialkylbarbituric acids, i, 1111.
unsymmetrical *CC*-dialkylbarbituric acids and their salts, i, 1111.
- Lazier, W. A., and H. Adkins**, alkylation of primary amines with aluminium alkoxides to give secondary amines free from tertiary amines, i, 630.
- Lazier, W. A.** See also **H. Adkins**.
- Lea, C., and J. K. Wood**, the system, antimonious oxide-hydrochloric acid-water, ii, 195.
- Leake, C. D., and F. J. Bacon**, properties of an alleged erythropoietic hormone, i, 893.
- Lear, M. E.**, dielectric constant of germanium tetrachloride, ii, 690.
- Leavenworth, C. S.**, basic amino-acids yielded by casein, i, 1362.
- Leavenworth, C. S., A. J. Wakemah, and T. B. Osborne**, basic substances from the juice of the alfalfa plant [*lucerne*], i, 597.
- Leavenworth, C. S.** See also **T. B. Osborne**.
- Lebeau, P.**, thermal fractionation of gaseous products from the pyrogenic decomposition of certain definite compounds, i, 942.
applications of the analysis of combustible gaseous mixtures, ii, 495.
- Lebeau, P., and C. Bedel**, determination of carbon monoxide, ii, 627.
- Lebeau, P., and M. Picon**, action of heat and vacuum on artificial graphite, ii, 853.
- Lebedev, A. von**, mechanism of alcoholic fermentation. III., i, 464, 802.
- Lebedev, A. von.** See also **P. P. Fedotéev**.
- Lebediantzev, A.**, modifications in soil dried in the air, i, 820.
- Le Bel, J. H.**, variations in the [quantity of] heat liberated by radium bromide, ii, 719.
slight variations in the heat given out by different samples of radium bromide, ii, 743.
- Lebert, M.** See **H. Chabanier**.
- Le Blanc, M., and K. Richter**, behaviour and properties of magnesium oxide from different sources, ii, 337.
- Lecher, H., and F. Graf**, peralkylated guanidines. II., i, 1051.
- Lecher, H., and C. Henck**, constitution of thiocarbamide and "thiuronium" salts, i, 1051.
- Lecher, H., and F. Holschneider**, sulphur phenyl chloride [*chlorothiolbenzene*], i, 728.
- Lecomte, J.**, qualitative studies on the infra-red absorption spectra of organic substances, ii, 439.
infra-red absorption spectra of organic compounds; isomerism and homology, ii, 512.

- Lecomte, J.**, quantitative study of intra-red absorption spectra of organic substances, ii, 641.
- Ledbury, W.** See *E. W. Blair*.
- Ledebur, K.** See *W. Heike*.
- Lederer, A. F.** See *F. Feigl*.
- Ledig, P. G.**, and *E. R. Weaver*, method for studying the rapid absorption of gases by liquids, ii, 318.
- Lee, B.** See *P. Haas*.
- Lee, F. A., C. Thing,** and *W. M. Dehn*, cacodyl derivatives, i, 152.
- Lee, F. A.** See also *E. V. Lynn*.
- Lee, H. R.**, and *D. O. Jones*, analysis of dehydrothio-*p*-toluidinesulphonic acid, ii, 793.
- Lee, H. R.** See also *D. O. Jones*.
- Leemans, E. T.**, tap plug, ii, 846.
- Leenhardt, C.** See *E. Carrière*.
- Leers, L.** See *R. Locquin*.
- Leersum, E. C. van**, effect of hæmoporphyrin on the deposition of calcium in the bones of rachitic rats, i, 455.
- Lees, S.**, proposed empirical equation of state for fluids, i, 231.
- Leffler, K.** See *R. Stollé*.
- Leffmann, H.**, tests for acetone and aldehydes, ii, 791.
- detection of ethyl phthalate, ii, 791.
- micro-distillation apparatus, ii, 846.
- Le franc, J.** See *O. Boudouard*.
- Lehmann, F.** See *H. Beumer*.
- Lehnartz, E.** See *G. Embden*.
- Leibfreid, L.**, chemistry of bull's testicles (extractives), i, 1256.
- Leiboff, S. L.**, determination of cholesterol in blood, ii, 708.
- Leibowitz, J.** See *H. Pringsheim*.
- Leibowitz, L.** See *H. Pringsheim*.
- Leifson, S. W.** See *J. J. Hopfield*.
- Leimdörfer, A.**, new basic crystalline constituent of blood. I., i, 1126.
- Lelièvre, (Mlle.) J.**, and *(Mlle.) Y. Ménager*, simultaneous determination of the mineral and organic iodine in algæ, ii, 420.
- Leluan, G.** See *A. Bouzat*.
- Lely, C. W. A.**, benzene and the tetrahedron formula, i, 380.
- Lemarchand**, equilibrium in the double decomposition of salts in aqueous solution, ii, 601.
- Lematte, L.**, and *(Mlle.) A. Delacroix*, volumetric determination of phosphoric acid; application to the study of phosphatic urinary acidity, ii, 780.
- Lemay, P., C. Guilbert, R. Petit,** and *L. Jaloustre*, influence of X-rays on leucocytic oxydases, i, 922.
- Lemay, P.** See also *A. Maubert*.
- Lemke, G.** See *J. von Braun*.
- Lemmermann, O.**, and *L. Fresenius*, behaviour of lime in the soil, i, 600.
- Lemoigne, M.**, production of β -hydroxybutyric acid by microbial processes, i, 353.
- mechanism of the production of β -hydroxybutyric acid by biochemical means, i, 695.
- Lemon, H. B.**, continuous spectrum of hydrogen, ii, 133, 367.
- Lenher, V.**, and *D. P. Smith*, distillation method of separating selenium from tellurium, ii, 698.
- Lenher, V.**, and *H. G. Taylor*, wetting of barium sulphate, ii, 737.
- Lennox, W. G.**, increase of uric acid in the blood during prolonged starvation, i, 1010.
- Le Noir, P.**, and *A. M. de Fossey*, urinary hydrogen-ion concentration in normal man during fasting, i, 795.
- ionic acidity in normal human urine; influence of food, i, 1135.
- Leo, H.**, action of *p*-dihydroxycamphane (Bredt), i, 1140.
- Leo, M.**, determination of copper as sulphide, ii, 873.
- León, A.** See *J. Ranedo*.
- Leon, A. I. de.** See *A. P. West*.
- Leonhardt, W.** See *P. Ruggli*.
- Leonibus, A. de.** See *G. Charrier*.
- Leopold, G. H.**, and *W. J. de Mooy*, determination of butter fat and coconut fat in fat mixtures, ii, 210.
- Lepape, A.**, detection of thorium emanation (thoron) in thermal springs by the method of induced activity, ii, 295.
- Lepape, A.** See also *J. Cabannes*.
- Lepkovsky, S.**, and *M. T. Nelson*, persistence of vitamin-C in the livers of rats on a scorbutic ration, i, 686.
- Lepkovsky, S.** See also *W. E. Tottingham*.
- Lescœur, L.**, and *(Mlle.) L. Moquet*, relation of the alkaline-earth metals to the acidity of urine, i, 795.
- Les Etablissements Pouleno Frères**, and *C. Oechslin*, preparation of hydroxyethylarsinic acid, i, 1054.
- Lesné, E., Hasard,** and *Langle*, uric acid content of the serum and spinal fluid in children, i, 783.
- Lespieau**, preparation of two true diacetylenic hydrocarbons, i, 702.

- Lesser, R.**, and **R. Weiss**, aromatic compounds containing selenium. VI., i, 1004.
- Leuchs, H.**, **W. Gladkorn**, and **E. Hellriegel**, strychnos alkaloids. XLI. Various observations on derivatives of brucine, i, 199.
- Leuchs, H.**, and **S. Kanao**, strychnos alkaloids. XLIII. Decomposition of the azide of dihydrobrucinic acid, i, 1231.
- Leuchs, H.**, and **F. Reinhart**, spirans. XI. Preparation of spirans with five- and seven-membered rings, i, 971.
- Leuchs, H.**, and **C. Taube**, strychnos alkaloids. XLII. Action of halogen on cacotheline and related substances, i, 983.
- Leulier, A.**, preparation of a monochloro-derivative of antipyrine, i, 875.
- chlorine or bromine derivatives obtained by the aid of mixtures of hydrogen peroxide and the corresponding halogen acids, i, 1297.
- Leuthesser, E.** See **Wilhelm Schneider**.
- Levaditi, C.**, mode of action of bismuth derivatives in spirillosis and trypanosomiasis, i, 1016.
- Levaditi, C.**, and **S. Nicolau**, mechanism of the action of bismuth derivatives in trypanosomiasis and spirillosis, i, 691.
- Levattier, H.** See **P. Fleury**.
- Levene, P. A.**, preparation of α -mannose, i, 15.
- epichitosamine penta-acetate, i, 19.
- the two isomeric chondrosamine hydrochlorides and the rates of their mutarotation, i, 19.
- optical behaviour of β -anhydroglucose, of β -anhydrogluconic acid, and of β -anhydromannonic acid, i, 615.
- preparation of α -mannose. II., i, 615.
- α -mannose penta-acetate, i, 615.
- specific rotations of hexonic and α -aminohexonic acids and of their salts, i, 616.
- adenine hexoside from yeast, i, 802.
- Levene, P. A.**, and **B. J. C. van der Hoeven**, concentration of vitamin-B, i, 1272.
- Levene, P. A.**, and **G. M. Meyer**, the preparation of diisopropylidene glucose, i, 14.
- benzylidene isopropylidene glucose, i, 14.
- isomeric diacetone-mannoses [mannose diisopropylidene ethers], i, 616.
- Levene, P. A.**, and **G. M. Meyer**, structure of diacetone [diisopropylidene] glucose. II. γ -Methylglucuronic acid and δ -methylglucoheptonolactone, i, 944.
- two isomeric tetramethylmannonolactones, i, 944.
- Levene, P. A.**, and **L. A. Mikeska**, Walden inversion, i, 940.
- Walden inversion. II. The optical rotation of α -thiolpropionic and corresponding α -sulphopropionic acids, i, 940.
- Levene, P. A.**, **I. P. Rolf**, and **H. S. Simms**, lysolecithins and lysocephalins. II. Isolation and properties of lysolecithins and lysocephalins, i, 438.
- Levene, P. A.**, and **J. Scheidegger**, synthesis of hydroxyamines by the Curtius method, i, 1049.
- Levene, P. A.**, **H. S. Simms**, and **M. H. Pfaltz**, relation of chemical structure to rate of hydrolysis of peptides. I. Synthesis, physical constants, and rates of hydrolysis of methylated peptides, i, 1360.
- Levene, P. A.**, and **F. A. Taylor**, synthesis of normal fatty acids from stearic acid to hexacosanoic acid, i, 827.
- Levene, P. A.**, **F. A. Taylor**, and **H. L. Haller**, lignoceric acid, i, 1134.
- Levene, P. A.**, and **I. Weber**, nucleosidases. II. Purification of the enzyme, i, 1268.
- nucleosidases. III. Degree of specificity of nucleosidase and distribution of it in various organs and in various species, i, 1269.
- Levene, P. A.**, **M. Yamagawa**, and **I. Weber**, nucleosidases. I. General properties, i, 1268.
- Levi, G. R.**, structure of the basic magnesium carbonates, ii, 681.
- crystal structure of calcium hydroxide, ii, 757.
- crystallographic identity of the two forms of mercuric oxide, ii, 860.
- crystal lattice of manganous oxide, ii, 862.
- Levi, G. R.**, and **A. Ferrari**, crystalline lattices of magnesium hydroxide and carbonate, ii, 611.
- crystalline lattices of the rhombohedral carbonates of bivalent metals, ii, 760.
- Levi, G. R.**, and **G. Natta**, action of aluminium sulphide on certain organic compounds, i, 952.
- Levi, G. R.**, and **A. Quilico**, non-existence of silver suboxide, ii, 757.

- Levi, S. M.**, solubility curves relating to the decomposition of double salts, ii, 388.
- Levi, T. G.**, dithioformic acid, i, 1041.
- Levi, T. G.** See also *G. Bruni*.
- Levin, C.** See *F. M. Rowe*.
- Levine, I.** See *R. Adams*.
- Levitskaya, M.**, Zeeman effect in the spectrum of palladium, ii, 435.
laws governing the palladium spectrum, ii, 435.
- Levschin, W. L.**, dependence of surface tension on density and temperature, ii, 829.
- Lévy, (Mlle.) J.**, semi-pinacolic transformation; necessity for the presence of the phenyl group in semipinacolic transformations, i, 283.
- Lévy, (Mlle.) J.** See also *M. Tiffeneau*.
- Lewis, G. N.**, extremely dry liquids, ii, 98.
magnetism of oxygen and the molecule O_2 , ii, 811.
- Lewis, H. B.**, and *H. Updegraff*, the organic constituents of the saliva, i, 114.
- Lewis, H. B.**, *H. Updegraff*, and *D. A. McGinty*, metabolism of sulphur. VI. Oxidation of cystine in the animal organism. II., i, 684.
- Lewis, H. B.** See also *A. A. Christman*, *W. H. Griffith*, *R. M. Hill*, and *H. Updegraff*.
- Lewis, H. F.**, *O'N. Mason*, and *R. Morgan*, methylations; hydrolysis of methyl sulphate, i, 1030.
- Lewis, N. B.**, and *A. C. D. Rivett*, examination of the binary system, sodium sulphite-water by extrapolation from the ternary system, sulphite-sulphate-water, ii, 478.
miscibility of anhydrous sodium sulphite and sulphate, ii, 479.
- Lewis, S. J.**, quantitative determination of the fluorescent powers (the spectrofluorescometry) of cellulose and its derivatives, i, 374, 501.
- Lewis, W. C. M.** See *H. A. Taylor*.
- Lewis, W. K.**, and *E. V. Murphee*, relation between vapour pressure and vapour composition in binary mixtures of volatile liquids, ii, 145.
- Lewis, W. L.**, *P. L. Cramer*, and *R. S. Bly* [with *E. A. Larsen*], condensation products of aminoarsanilic acid (3:4-diaminophenylarsinic acid), i, 1245.
- Lewitzky, M. A.** See *A. Joffé*.
- Ley, H.**, *C. Schwarte*, and *O. Münnich*, specific subsidiary valency linkings; internally complex salts of bivalent iron, ii, 228.
- Ley, H.**, and *F. H. Zschacke*, determination of constitution by spectroscopic methods; constitution of aminoacids. I., i, 1341.
- Ley, H.** See also *R. Mecke*.
- Leybold, W.**, dissolution of iron by carbonic acid, ii, 413.
- Li, T. H.** See *A. Rosenheim*.
- Lidov, A. P.**, density of carbon dioxide from natural limestones, ii, 607.
- Lieb, H.**, and *D. Schwarzl*, elemic acid from manila elemi resin, i, 1312.
- Lieb, H.**, and *O. Wintersteiner*, micro-analytical determination of phosphorus and arsenic in organic substances, ii, 781.
- Lieben, F.**, nitration of proteins. I. and II., i, 779.
- Liebert, F.**, potentiometric determination of chlorides in presence of colloids, ii, 347.
direct-reading potentiometer for determination of hydrogen-ion concentration, ii, 497.
- Liebesny, P.**, specific dynamic action of proteins, i, 450.
- Liebreech, J. E.**, periodic phenomena during the electrolysis of chromic acid, ii, 538.
- Liebster, A.** See *S. Fränkel*.
- Liefde, W. C. de**, determinations of conductivity of electrolytes by methods other than that of Kohlrausch, ii, 456.
- Liehr, O.** See *E. Haselhoff*.
- Liempt, J. A. M. van**, heat of recrystallisation, ii, 19.
the precipitation of tungstic acid, ii, 194.
equilibrium diagram of carbon, ii, 852.
- Liempt, J. A. M. van.** See also *W. Geiss*.
- Liepe, J.** See *H. P. Kaufmann*.
- Lier, H.** See *P. Karrer*.
- Liesegang, R. E.**, calcium fixation by animal tissues. I. and II., i, 587, 1129.
- Lietz, M.**, preparation of a nickel catalyst and its reducing activity, ii, 667.
- Lievens, G.**, freezing point of organic substances. VIII. Melting points of esters containing a C_6 group, ii, 590.
- Lifschitz, I.**, functions of chromophores. XI. The quinone chromophore. III., i, 1325.
- Lifschitz, I.** [with *J. Zimmermann*, *H. Lourié*, and *G. A. ten Bokkel Huinink*], functions of chromophores. X. The quinone chromophore. II., i, 1325.
- Lifschitz, I.**, *H. Lourié*, *J. Zimmermann*, and *G. A. ten Bokkel Huinink*, functions of chromophores. IX. The quinone chromophore. I., i, 654.

- Liggett, T. H.** See *W. D. Harkins*.
- Lilljeqvist, G.** See *F. Zetzsche*.
- Limberger, A.** See *G. Klein*.
- Linck, G., and H. Jung**, dehydration and rehydration of gypsum, ii, 758.
- Linck, G.** See also *G. Schott*.
- Lind, S. C.**, gas kinetics, ii, 241.
- phosphorescence of American Iceland spar after radium radiation, ii, 621.
- Lind, S. C., and D. C. Bardwell**, chemical action produced by niton. III. Determination by a chemical method of the mean effective path of α -particles in small spheres, ii, 11.
- chemical action produced by niton, ii, 840.
- Lind, S. C.** See also *R. B. Moore*.
- Lindau, P.**, structure of the second positive group of nitrogen bands, ii, 711.
- Lindau, P.** See also *R. Mecke*.
- Lindemann, H.**, the chemistry of carbazole, i, 550.
- Lindemann, H., and H. Forth**, quinone-methides [methylenequinones] and ψ -phenolhalogenides. II, i, 181.
- Lindemann, H., and F. Werther**, synthesis of 1-aminocarbazole, i, 1234.
- Linder, G. C., C. Lundsgaard, and D. D. Van Slyke**, globulin and albumin content of the plasma in nephritis, i, 1011.
- Linder, G. C.** See also *H. A. Salvesen*.
- Linderström-Lang, K.** See *S. P. L. Sørensen*.
- Lindinger, F.** See *L. Moser*.
- Lindner, J., M. Djulgerova, and A. Mayr**, course of the quinaldine synthesis with β -aminotetrahydronaphthalene, i, 1102.
- Lindner, K., and L. Apolant**, tellurium dichloride, ii, 604.
- Lindner, K., and H. Feit**, addition reactions, molecular compounds, and the hydrolysis of tantalum pentachloride, ii, 320.
- chlorides of bivalent molybdenum, tungsten, and tantalum. III. Derivatives of tritantalum hexachloride ["tantalum dichloride"], ii, 768.
- Lindner, K., E. Haller, and H. Helwig**, chlorides of bivalent molybdenum, tungsten, and tantalum. II. Trimolybdenum hexachloride ["molybdenum dichloride"] and its derivatives, ii, 192.
- Lindner, K., and A. Köhler**, chlorides of bivalent molybdenum, tungsten, and tantalum. IV. Derivatives of tritungsten hexachloride ["tungsten dichloride"], ii, 864.
- Lindsay, R. B.**, atomic models of the alkali metals, ii, 516.
- Ling, A. R.** See *F. J. Paton*.
- Linhard, M.** See *O. Hönigschmid*.
- Linhardt, K.** See *C. Neuberg*.
- Link, K. P., and E. R. Schulz**, effects of the method of desiccation on the nitrogenous constituents of plant-tissue, i, 1275.
- Linnmann, W.** See *K. A. Hofmann*.
- Liotta, D.** See *U. Sammartino*.
- Lipman, O. B., and J. K. Taylor**, have green plants the power of fixing elementary nitrogen from the atmosphere? i, 1276.
- Lipmann, F.** See *P. Rona*.
- Lipp, P.**, history of ketopinic acid and "norcamphane-1-carboxylic acid," i, 960.
- Lipp, P., and F. Lausberg**, constitution of so-called β -bromocamphor, i, 655.
- Lippmann, E. O. von**, nitrogenous components of beetroot and beetroot products, i, 379.
- Lipps, G.** See *W. Dilthey*.
- Lipschitz, W., and J. Weber**, formation of methæmoglobin, i, 44.
- Liquier, (Mlle.) J.**, abnormal rotatory dispersion of acid solutions of nicotine in relation to hydrogen-ion concentration, ii, 806.
- Lisiecki, J.** See *K. Jabłozyński*.
- Lisievici-Drăganescu, (Mme.) A.**, relation between the stabilisation of solutions of hydrogen peroxide and the modification of surface tension, ii, 404.
- Lisk, H.**, decomposition products of spore-bearing bacilli in heated milk, i, 1016.
- Lissner, A.**, basic magnesium hypochlorite and its electrolytic preparation, ii, 759.
- List, P.**, formation of porphyrin from sulphur-hæmoglobin, i, 784.
- formation of porphyrin from "carbon dioxide blood," i, 1126.
- Livshis, L.** See *E. J. Witzemann*.
- Ljunggren, G.**, preparation of solutions of acetoacetic acid, i, 706.
- the rate of hydrolysis of methyl acetoacetate, ii, 99.
- Lloyd, D. J.** See *M. Kaye*.
- Lloyd, J. U.** See *C. E. Sando*.
- Lloyd, W. V.** See *E. J. Weeks*.
- Lobo-Onell, C.** See *H. Chabanier*.
- Locher, E.** See *E. Wilke-Dörfurt*.
- Locher, F.** See *P. Karrer*.
- Lochte, H. L.**, purification of methyl ethyl ketone by sodium iodide, i, 1166.

- Lochte, H. L.** See also *H. H. Har-kins*.
- Locke, A.**, decomposition of dihydroxy-maleic acid, i, 708.
- Locquin, R.**, and *L. Leers*, some new pinacolins, i, 941.
dehydration of some new pinacones, i, 1043.
- Locquin, R.**, and *W. Sung*, pennone [$\beta\beta\gamma\gamma$ -tetramethylpentan- δ -one], i, 613.
- Locquin, R.**, and *S. Wouseng*, preparation of dialkylethinenylcarbinols, i, 822.
methylpropylethinenylcarbinol [γ -methyl- $\Delta\alpha$ -hexinen- γ -ol] and its derivatives, i, 822.
- Loczka, A.** See *F. von Konek*.
- Loeb, J.**, explanation of the colloidal appearance of the proteins, ii, 96.
hydrophilic and hydrophobic colloids and the influence of electrolytes on membrane potentials and cataphoretic potentials, ii, 310.
- Loeb, J.**, and *M. Kunitz*, ultimate units in protein solutions and the changes which accompany the process of solution of proteins, ii, 460.
- Loeb, L. B.**, mobilities of electrons in helium [hydrogen, and nitrogen], ii, 290.
darkening of phosphorescent zinc sulphide, ii, 484.
- Loeb, L. F.** See *H. Freundlich*, and *A. Lasnitzki*.
- Loeb, R. F.** [with *S. Steinberger*], diffusibility of the calcium of blood-serum through collodion membranes; effect of sodium chloride and changes in hydrogen-ion concentration, i, 783.
- Loeb, R. F., D. W. Atchley**, and *E. M. Benedict*, origin of urinary ammonia, i, 1257.
- Loeb, R. F.** See also *D. W. Atchley*.
- Loebel, R. O.** See *H. E. Himwich*.
- Löhr, H.**, reduction of aromatic nitro-groups by the tissue of guinea-pigs after treatment with proteins and during anaphylactic shock. IX. The effect of proteins, i, 792.
- Lörenskiöld, H.** See *H. Wieland*.
- Loevenhart, A. S.** See *H. L. Schmitz*, and *A. G. Young*.
- Lövgren, S.**, volumetric determination of ammonium salts, ii, 870.
- Loew, O.**, a labile form of protein and its relation to living protoplasm. II., i, 355.
- Loewe, S.**, derivatives of quinoline, i, 991.
- Löwenbein, A.**, transformation of *o*-hydroxychalkone into flavanone; dehydrogenation of flavanone to flavone by phosphorus pentachloride; synthesis of flavone, i, 1221.
- Löwenbein, A.** [with *E. Pongrácz, E. A. Spiess*, and *L. Popper*], 2:4-diarylchromenes, i, 1221.
- Löwenthal, H.** See *R. Wintgen*.
- Loewy, A.**, and *J. Förster*, influence of rarefied air on the gaseous metabolism of the blood, i, 679.
- Löwy, (Mlle.) R. B.**, lithium perborate, ii, 175.
- Logan, J. F.**, the protein matter of bile, i, 341.
- Loiseleur, J.** See *L. Hugounenq*.
- Lomanitz, S.**, decomposition of proteins and amino-acids by various groups of soil micro-organisms, i, 1271.
- Lombaers, R. H.**, study of the freezing of solutions as a method of investigating some problems in pure chemistry. I. Systems containing *sec*-butyl alcohol and its derivatives, i, 856.
- Lombard, S.** See *A. Karl*.
- Lomholt, S.** See *J. A. Christiansen*.
- Lommel, W.**, and *R. Engelhardt*, silver as catalyst for the absorption of ethylene by sulphuric acid, i, 602.
- Londberg, G.** See *R. O. Herzog*.
- Long, C. H. N.** See *A. V. Hill*.
- Long, E. R.**, chemical evidence on the phylogenetic classification of the tubercle bacillus, i, 915.
- Long, M. L.** See *N. R. Blatherwick*.
- Long, N. H.**, and *A. S. Parkes*, nature of foetal re-adsorption, i, 1379.
- Longchambon, L.**, rotatory dispersion of tartaric acid, ii, 373.
rotatory dispersion of crystals, ii, 512.
- Longinescu, G. G.**, relationship between melting points and boiling points, ii, 722.
- Longinescu, G. G.**, and *(Mlle.) G. Chaborski*, detection of sodium and potassium by wet analysis, ii, 276.
- Longinescu, G. G.**, and *I. N. Longinescu*, solutions considered as binary mixtures of liquids, ii, 302.
- Longinescu, G. G.**, and *C. N. Theodosiu*, lecture experiments to show the inflammability of hydriodic acid and hydrogen sulphide, ii, 324.
- Longinescu, I. N.** See *G. G. Longinescu*.
- Lonstein, I.** See *H. H. Green*.
- Loo, M. van.** See *F. E. Bartell*.
- Looney, J. M., H. Berglund**, and *R. C. Graves*, several cases of cystinuria, i, 121.

- Loosli, A. See *F. Zetzsche*.
- Lo Priore, G., the Guareschi reaction with proteins, ii, 795.
- Lorber, L., mechanism of the antipeptic action of blood serum, i, 1147.
- Lorber, L. See also *D. Acél*.
- Lorenser, E. See *P. Ludewig*.
- Lorenz, L. See *W. Manchot*.
- Lorenz, R., equilibrium between metals and salts in the molten state. II. and IV., ii, 484, 761.
theory of vapour-pressure curves, ii, 654.
- Lorenz, R., and *E. Bergheimer*, determination of the ratio of the combining weights of chlorine and silver, ii, 679.
solubility of silver chloride and Gay-Lussac's silver titration, ii, 757.
- Lorenz, R., *W. Fraenkel*, and *J. Silberstein*, equilibrium between metals and salts in the molten state. I. The system, lead-cadmium-lead chloride-cadmium chloride, ii, 258.
equilibrium between metals and salts in the molten state. III. The system, thallium-cadmium-thallic chloride-cadmium chloride, ii, 761.
- Lorenz, R., and *W. Herz*, volume in the liquid and gaseous states, ii, 300.
dielectric constant and volume of the molecule, ii, 520.
comparison of molecular volume numbers. I., ii, 520, 823.
attempt to include transition temperatures in the law of corresponding states, ii, 520.
boiling points and heats of evaporation of salts, ii, 549.
critical densities of salts, ii, 755.
- Lorenz, R., and *E. Wiedbrauck*, adsorption. II. Determination of the adsorption of gases from gas mixtures [by wood charcoal], ii, 474.
adsorption. III. Reversal during the adsorption of carbon dioxide and hydrogen by wood charcoal, ii, 474.
- Lorenzer, E. See *P. Ludewig*.
- Lorenzini, A., creatinine content of the urine of healthy and sick children, i, 1135.
- Lorinser, P. See *H. Lüers*.
- Lormand, C. See *M. François*.
- Lorth, P. See *E. Benary*.
- Losana, L. See *C. Montemartini*.
- Lottermoser, A., investigations on the adsorption of iodine by various substances, ii, 93.
starch iodide, i, 269, 373.
- Lottermoser, A., and *F. Friedrich*, aluminium oxide gel and sol, ii, 487.
- Lottermoser, A., and *H. Walde*, chromate electrolysis without a diaphragm, ii, 688.
- Louder, E. A., *T. R. Briggs*, and *A. W. Browne*, vapour-pressure curves for systems containing alcohol, ether, and water, i, 1157.
- Lourié, H. See *I. Lifschitz*.
- Lovelace, B. F., *W. H. Bahlke*, and *J. C. W. Frazer*, vapour pressures of lithium chloride solutions at 20°, ii, 108.
- Low, W. See *Erich Müller*.
- Lowe, C. H., and *C. James*, preparation of diphenyl, i, 275.
- Lowe, P. See *A. L. Hughes*.
- Lowndes, J. See *R. H. A. Plimmer*.
- Lowry, A., and *C. M. Moore*, electrolytic oxidation of *isoeugenol*, i, 182.
- Lowry, E. F., infra-red absorption of carbon monoxide, ii, 513.
- Lowry, H. H., relation between the hydrogen content of certain charcoals and some other properties, ii, 393.
- Lowry, H. H., and *S. O. Morgan*, rate of oxidation of certain charcoals, ii, 397.
- Lowry, T. M., stereoisomerism among derivatives of diphenyl, i, 31.
electronic theory of valency. IV. Origin of acidity, ii, 447.
theory of valency, ii, 650.
- Lowry, T. M., and *P. C. Austin*, anomalous rotatory dispersion of tartaric acid, i, 940; ii, 714.
- Lowry, T. M., and *J. O. Cutter*, rotatory dispersive power of organic compounds. XI. Molecular weight of ethyl tartrate and the origin of anomalous rotatory dispersion in tartaric acid and its derivatives, i, 1040.
- Lowry, T. M., and (*Miss*) *H. S. French*, valency. IV. Absorption spectra of camphor, benzylidenecamphor, and camphorquinone; optical evidence of two types of conjugation, i, 1212.
- Lowry, T. M., and *E. M. Richards*, rotatory dispersive power of organic compounds. XII. Octyl alcohol and octyl oxalate, i, 1029.
- Lowry, T. M., and *E. E. Walker*, induced asymmetry of unsaturated radicals in optically active compounds, ii, 373.
- Lowry, T. M. See also (*Miss*) *H. S. French*.
- Lowy, A. See *R. Dunbrook*, *C. G. King*, and *K. S. Tesh*.
- Lublin, A., determination of acetone and β -hydroxybutyric acid in small quantities of urine, ii, 634.
- Lucas, F. F. See *E. E. Schumacher*.

- Lucas, G. H. W.**, fractionation of bios and comparison of bios with vitamins-B and -C, i, 1388.
- Lucas, K.**, pyro-electricity of two derivatives of camphor, ii, 224.
piezo-electricity and molecular asymmetry, ii, 586.
- Lucas, W. W.** See **C. A. Kraus**.
- Luce, E.**, production of acetone by the action of potassium acetate on acetic anhydride, i, 140, 612.
- Luck, J. M.**, amide nitrogen of caseinogen, i, 891.
ammonia production by animal tissues in vitro. I. Use of mixed tissue extracts, i, 1384.
ammonia production by animal tissues in vitro. II. Demonstration of urease in the animal body, i, 1384.
- Lucke, B.** See **M. McCutcheon**.
- Ludewig, P.**, and **E. Lorensen**, employment of normal radium and uranium solutions for emanation measurements. II., ii, 227.
radium emanation in air from the Schneeberg mines, ii, 296.
- Ludewig, S.** See **M. Bergmann**.
- Ludlam, E. B.**, and **W. West**, phosphorescence of fused transparent silica, ii, 220.
- Ludwig, H.** See **O. Mumm**.
- Lübovzov, (Miss) K.** See **S. Nametkin**.
- Lüdemann, O.** See **E. Ott**.
- Lueders, C. W.**, and **O. Bergeim**, determination of trypsin and lipase in gastric contents, ii, 432.
- Lüdy, F. jun.** See **A. Tschireh**.
- Lüers, H.**, and **F. Albrecht**, antiamylase, i, 1264.
- Lüers, H.**, and **P. Lorinser**, heat and radiation inactivation of malt amylase, i, 468.
- Lüers, H.**, and **F. Ottensooser**, yeast protein as antigen, i, 1150.
- Lüers, H.**, and **M. Siebert**, proteins of oats, i, 597.
- Lüssem, A.** See **R. Anschütz**.
- Lüthy, A.**, ultra-violet absorption spectra of unsaturated compounds; spectra of vapours of acetaldehyde, crotonaldehyde, and glyoxal, ii, 80.
- Luff, G.**, determination and separation of bismuth by hydrolysis, ii, 278.
- Lukes, R.** See **E. Votoček**.
- Lukirsky, P. I.**, soft X-rays from carbon, ii, 215.
soft X-rays, ii, 368.
- Lumia, C.**, determination of the availability of fertilisers, i, 1156.
- Lumière, A.**, irregularities of the lactic fermentation in presence of certain antiseptics, i, 353.
- Lumière, A.**, variability of lactic acid fermentation, i, 803.
regularity of lactic acid fermentation, i, 1385.
- Lumière, A.**, and **F. Perrin**, chemical functions of hypnotics, and of hydantoin derivatives in particular, i, 1101.
- Luna, de**, participation of a peroxidase in the appearance of the pigment in *Drosophila melanogaster*, Loew, i, 348, 808.
- Lundegardh, H.**, influence of hydrogen-ion concentration in the presence of salts on the growth of *Gibberella Saubinetii*, i, 912.
antagonism of hydrogen ions and neutral salt ions in their action on the germination and growth of wheat, i, 1393.
- Lundell, G. E. F.**, interference of cobalt in the bismuthate method for manganese, ii, 64.
- Lundell, G. E. F.**, and **H. B. Knowles**, determination of titanium by reduction with zinc and titration with permanganate, ii, 66.
use of cool solutions in the Jones reductor, ii, 622.
- Lundin, H.**, the influence of oxygen on the assimilatory and dissimilatory activity of yeast. III. The behaviour of added alcohol in a yeast suspension, i, 247.
the influence of oxygen on the assimilatory and dissimilatory activity of yeast. IV. The behaviour of certain organic acids, i, 248.
- Lundsgaard, C.** See **G. C. Linder**.
- Lunn, E. G.** See **T. R. Hogness**.
- Lunt, R. W.** See **R. Robinson**.
- Lupton, H.** See **A. V. Hill**.
- Luserna, E. de.** See **E. Briner**.
- Lusk, G.**, animal calorimetry. XXIV. Oxidation of mixtures of carbohydrates and fat, i, 682.
- Lustig, O.** See **J. Pollak**.
- Lutz, R. E.** See **J. B. Conant**.
- Lutze, H.** See **A. Franz**.
- Luy, P.** See **P. W. Danckwortt**.
- Lyman, T.**, spectrum of helium in the extreme ultra-violet, ii, 437, 638.
series in the spectra of aluminium and magnesium in the extreme ultra-violet, ii, 802.
- Lynch, D. F. J.** See **H. L. Haller**.
- Lynn, E. V.**, and **F. A. Lee**, resorcinol and phloroglucinol as colour reagents, ii, 572.
- Lynn, E. V.**, and **H. A. Shoemaker**, laboratory preparation of ethyl sulphate, i, 605.

- Lyon, C. J.**, effect of phosphates on [plant] respiration, i, 476.
Lyons, A. B., determination of methyl alcohol ii, 69.
 the resorcinol test for methyl alcohol, ii, 279.
 phenyl hydrazine test for formaldehyde, ii, 572.

M.

- Maas, H.** See *G. Jander*.
Maas, J., Ivar Bang's micro-chemical method for determining fat and cholesterol, ii, 359.
Maass, O., molecular attraction and molecular combination, ii, 653.
Maass, O., and *P. G. Hiebert*, hydrogen peroxide. IV. Action of the halogens and halogen hydrides, ii, 326.
Mabery, C. F., the lubricant and asphaltic hydrocarbons in petroleum, i, 129.
Macallum, A. D., *o*-amino- and *o*-acetamido-phenylstibinic acids, i, 109.
Macallum, S. P. See *J. S. Townsend*.
Macara, T. See *C. L. Hinton*.
Macaulay, R. M. See *F. J. Wilson*.
McBain, J. W., micelles and colloidal ions, ii, 27.
 liquid crystals, soap solutions, and X-rays, ii, 299, 518.
 electrical double layer and its relation to ionic migration, ii, 594.
McBain, J. W., *R. S. Harborne*, and *A. M. King*, method of determining the detergent action of soaps, ii, 155.
McBain, J. W. See also *M. E. Laing*.
Macbeth, A. K., and *J. Mackay*, glycogen. I. Partial methylation, and the isolation of methylated glucoses, i, 1046.
McBurney, D. See *W. G. France*.
McCall, A. G., influence of acidity on plant growth without regard to other factors, i, 922.
McCance, R. A., production of ammonia and urea in autolysis, i, 906.
McCay, LeR. W., new light filter. [Detection of potassium], ii, 123.
McClelland, N. P. See *J. A. Aeschlimann*.
McClendon, J. F., determination of hydrogen ions in the gastric contents, i, 784.
 determination of iodine in iodine metabolism, ii, 420.
 determination of iodine in food, drink, and excreta, ii, 624.
McClure, C. W., and *E. Mortimer*, cholesterol content of the bile. I. Methods for its determination in the contents of the duodenum, ii, 432.
Macco, G. di, coagulating and precipitating action of ricin, i, 682.
McCollum, E. V. See *P. G. Shipley*.
McCracken, R. See *H. Gilman*.
McCurdy, W. H., the striated discharge in mercury vapour, ii, 808.
McCutcheon, M., and *B. Lucke*, mechanism of vital staining with basic dyes, i, 790.
McDavid, J. W., vapour pressures of fuming sulphuric acid and their application to the problem of the absorption of sulphur trioxide, ii, 330.
Macdonald, J. See *J. C. Irvine*.
McEachron, K. B. See *F. O. Andregg*.
McElvain, S. M., piperidine derivatives; a cyclic and an open-chain compound related in structure to cocaine, i, 985.
McElvain, S. M., and *R. Adams*, synthesis of a new bicyclic nitrogen ring; isogranatanine derivatives; preparation of an isomeride of homococaine, i, 417.
McEwen, B. C. See *R. R. Parvattiker*.
McGavack, J., substitution and addition of chlorine to the caoutchouc molecule, i, 64.
McGee, J. M. See *H. A. Spoehr*.
McGeorge, W. T., influence of silica, lime, and soil reaction on the availability of phosphates in highly ferruginous soils, i, 1022.
 value of soil analysis when limited to an intensive single cropping system, i, 1024.
McGinty, D. A. See *H. B. Lewis*.
McGookin, A., and *I. M. Heilbron*, isomerism of the styryl alkyl ketones. I. Isomerism of 2-hydroxystyryl methyl ketone, i, 1323.
McGuigan, H., and *G. A. Brough*, rhythmic banding of precipitates (Liesegang's rings), ii, 239.
McGuinn, A. F., action of dicyanodiamide and guanylecarbamide sulphate on plant growth, i, 1022.
McGuire, G., and *K. G. Falk*, influence of insulin on the dextrose-fermenting action of *Bacillus coli*, i, 1272.
Mach, F., and *R. Herrmann*, determination of formaldehyde in the presence of acetone and acetaldehyde and of formaldehyde and acetone in the presence of each other, ii, 352.

- Mach, F.**, and **F. Sindlinger**, determination of pyridine, especially in the presence of nicotine, by means of silicotungstic acid, ii, 357.
- McHargue, J. S.**, association of manganese with vitamins, i, 900.
- Macht, D. I.**, and **O. R. Hyndman**, relation between the chemical structure of bile acids, and their phytopharmacological and zoöpharmacological reactions, i, 596.
- Macht, D. I.** See also **C. E. Bills**.
- McHugh, G. F.** See **O. L. Brady**.
- MacInnes, D. A.** See **W. R. Hainsworth**, and **E. R. Smith**.
- MacIntire, W. H.**, and **W. M. Shaw**, effect of soil suspensions on the solubility of the sulphate radical in the system, $\text{Ca}(\text{OH})_2\text{-CaSO}_4\text{-H}_2\text{O}$, i, 599.
- MacIntire, W. H.**, **W. M. Shaw**, and **J. B. Young**, lysimetric studies; soil and subsoil in calcium-magnesium interchange, i, 356, reciprocal repression exerted by calcic and magnesian additions upon the solubility of native materials in surface soil, i, 599.
- McIntosh, J. F.** See **H. A. Salvesen**.
- Mack, E., jun.** See **M. L. Dundon**.
- Mackay, C. A.**, ionising potentials of multiatomic gases, ii, 807.
- Mackay, J.** See **A. K. Macbeth**.
- Mackay, T. C.**, Hall effect in silicon-iron alloys, ii, 811.
- McKee, R. H.**, and **N. E. Woldman**, analysis of sodium hyposulphite, ii, 777.
- McKeehan, L. W.**, crystal structure of iron-nickel alloys, ii, 863.
- McKenzie, A.**, and **E. Roger**, migration of groups in derivatives of benzoin and desylamine, i, 650.
- McKenzie, A.**, and **I. A. Smith**, catalytic racemisation of the diastereoisomeric *l*-menthyl phenylbromoacetates, i, 1066.
- McKenzie, A.**, and **T. M. A. Tudhope**, optically active β -phthalimino- β -phenylpropionophenones, i, 649.
- McKeown, S. S.**, Hall effect and specific resistance of cathodically deposited films of gold, ii, 224.
- Mackersie, W. G.**, diuretic and anti-diuretic effects of pituitary extract, i, 1140.
- McKie, (Miss) P. V.**, isomorphism of the amides and substituted amides of dichloro- and chloriodo-acetic acids, and of chlorobromo- and chloriodo-acetic acids, i, 715.
- McKinney, J. W.**, constitution of kerogen, i, 601.
- McLaughlin, L.**, and **K. Blunt**, urinary excretion of organic acid and its variation with diet, i, 458.
- creatinine excretion of women, i, 459.
- McLean, A. J.** See **P. D. Lamson**.
- McLean, H. C.** See **J. S. Joffe**.
- Maclean, (Mrs.) I. S.**, and **(Miss) D. Hoffer**, carbohydrate and fat metabolism in yeast, i, 352.
- McLennan, J. C.**, and **G. M. Shrum**, luminescence of condensed gases at very low temperatures, ii, 642.
- MacLeod, G.** See **M. S. Rose**.
- MacLeod, J. J. R.** See **C. H. Best**, **G. S. Eadie**, and **P. T. Herring**.
- McLeod, J. W.**, and **J. Gordon**, catalase production and sensitiveness to hydrogen peroxide among bacteria; a scheme of classification based on these properties, i, 125.
- production of organic compounds of sulphur in bacterial cultures with special reference to glutathione, i, 1386.
- McLeod, J. W.** See also **G. A. Wyon**.
- McMaster, L.**, and **P. K. Pratte**, normal ammonium salts of some organic acids and their substitution derivatives. VIII., i, 168.
- McMeekin, T. L.** See **F. C. Koch**.
- Macri, V.**, detection of carbonate in sodium hydrogen carbonate by means of phenolphthalein, ii, 873.
- McVicker, W. H.**, **J. K. Marsh**, and **A. W. Stewart**, emission spectra of organic compounds, ii, 712.
- Macy, R.** See **A. E. Hill**.
- Madelung, W.**, indoleazobenzene, i, 674.
- Madelung, W.** [with **O. Haller**], alkyl and acyl derivatives of leuco-indigotin and indoxyl, i, 423.
- Madelung, W.**, and **P. Siegert**, the product of the action of acidic reducing agents on indigotin, i, 421.
- Madelung, W.**, and **O. Wilhelmi**, imines, anils, and hydrazones of indigotin and the stereochemical configuration of the indigoids, i, 422.
- Madinaveitia, A.**, and **S. Hernández**, hypoglycæmic action in bases of the choline group, i, 911.
- Maeda, K.**, the ferments in the placenta, i, 238.
- ferments in the amniotic fluid, i, 458.
- Maeda, T.**, equilibrium between reducing gases and metallic oxides. I. (1) Carbon monoxide and tin oxide; (2) carbon monoxide and zinc oxide, ii, 2.
- Mäde, H.** See **R. Willstätter**.

- Magness, J. R.**, and **H. C. Diehl**, physiological studies on apples in storage, i, 595.
- Mahal, A.** See **C. Gränacher**.
- Maige, A.**, variation with temperature of the "swelling value" of amylogen, i, 1394.
- Maignon, F.**, constitution and mode of action of biochemical catalysts or enzymes; effects of electrolysis on enzymes of pancreatic juice and on the amylase of germinated barley, i, 350.
- effects of electrolysis on animal tissue enzymes; abundance of silicic acid in the ash, i, 464.
- nature, constitution, and mode of action of animal tissue enzymes, i, 592.
- Maihe, A.**, azo-dyes from *m*-methyl-ethylbenzene, i, 576.
- catalytic decomposition of the formic amides, i, 623.
- synthesis of higher homologues of *m*-methylethylbenzene, i, 630.
- catalytic hydration of Schiff's bases, i, 645.
- formation and catalytic decomposition of terpinolene, i, 865.
- decomposition of animal wax, i, 1033.
- decomposition of chlorophyllic extracts, i, 1091.
- Maillard, L. C.**, spontaneous crystallisation of uric acid from urine, i, 459.
- Maire, E. D.** See **P. D. Lamson**.
- Majima, R.**, and **S. Morio**, aconite alkaloids. III. So-called jesaconitine, i, 1225.
- Majima, R.**, and **T. Shigematsu** [with **T. Rokkaku**, and **T. Ikeda**], synthesis in the indole group. III. Formation of *N*-acylindoles, i, 1234.
- Majima, R.**, **T. Shigematsu**, and **T. Rokkaku** [with **T. Ikeda**, and **I. Miyagawa**], syntheses in the indole group. IV. Indolyketonic acids, i, 1235.
- Majima, R.**, and **H. Suginomé**, aconite alkaloids. II. Aconitine and pyraconitine, i, 1224.
- Majima, R.**, **H. Suginomé**, and **S. Morio**, aconite alkaloids. I. Different isomerides of japaconitine, i, 1223.
- Major, R. H.**, potassium fluoride as preservative for blood, i, 682.
- Majumdar, S. K.** See **J. N. Mukherjee**.
- Maki, T.**, condensation of fluorescein and aniline homologues in presence of hydrochloric acid, i, 1065.
- Malchow, W.** See **A. Schönberg**.
- Malés, B.** See **I. Gjaja**.
- Malet, G.** See **E. Briner**.
- Malfitano, G.**, and **M. Catoire**, solubility and insolubility of starch, i, 141.
- Mallik, D. N.**, stability of the atom, ii, 797.
- Mallmann, W. L.**, and **C. Hemstreet**, isolation of an inhibitory substance from plants, i, 1391.
- Mallock, A.**, refractive index of gums, i, 659.
- specific and latent heats of iron and steel, ii, 522, 764.
- Malmy, M.** See **L. Grimbart**.
- Malzschevsky, W.** See **L. Tschugaev**.
- Mameli, E.**, transformation of furan rings into oxazine rings, i, 1219.
- Mameli-Calvino, E.**, localisation of the cyanogenetic glucosides in *Prunus occidentalis* and *P. myrtifolia*, i, 355.
- Manca, E.** See **E. Puxeddu**.
- Manchot, W.** [with **J. König**, and **H. Gall**], compounds of silver salts with carbon monoxide, ii, 609.
- Manchot, W.**, and **E. Bauer**, ozone in flames, ii, 543.
- Manchot, W.**, and **L. Lorenz**, thermal dissociation of manganese and magnesium carbonates, ii, 685.
- Manchot, W.**, and **F. Oberhauser**, the bromometric determination of ozone, ii, 200.
- bromometric determination of ammonia, sulphurous acid, hydrogen sulphide, and chromates, ii, 274.
- bromometric determination of iodine values, ii, 507.
- determination of iron by means of permanganate in the presence of hydrochloric acid, ii, 703.
- equilibrium of the reaction between arsenious acid and bromine, and between arsenic acid and hydrogen bromide, ii, 851.
- Manchot, W.**, and **F. Oberhauser** [with **E. Bauer**], bromometry as a substitute for iodometry, ii, 199.
- Manchot, W.**, and **F. Steinhauser**, bromometric determination of phosphorous and hypophosphorous acids, ii, 779.
- Mandelbaum, M. R.** See **M. T. Bogert**.
- Manegold, E.** See **G. Jander**.
- Manfredi, A.** See **G. Charrier**.
- Mangold, E.**, and **N. Kitamura**, solution of fibrin and the inhibition of blood clotting by nicotine, i, 1010.
- Maniwa, S. H.**, phylloolulcin, a sweet principle of the leaves of *Hydrangea Thunbergii*, i, 1090.
- Manjunath, L. B.** See **O. L. Brady**.

- Manley, J. J.**, preliminary measurement of a primary gas-grown skin, ii, 529.
removal of gas-grown skins from a Sprengel pump, ii, 530.
modified vacuum tubes, ii, 647.
- Mann, C. E. T.**, determination of coefficients of diffusion in gels by means of chemical analyses, and a comparison of results obtained with those yielded by the indicator method, ii, 307.
- Mann, F. G.**, and (*Sir*) **W. J. Pope**, optically active sulphilimines, i, 656.
- Mann, F. G.** See also (*Sir*) **W. J. Pope**.
- Mannich, C.**, and **M. Bauroth**, synthesis of amino-ketonic acids, i, 947.
- Mannich, C.**, and **K. Ritsert**, condensation of ethyl diethylammonium malonate with formaldehyde, i, 946.
- Mann-Siechler, F. von.** See **O. Fischer**.
- Manquat, M.**, oxidising power of the nuclei of the epithelium of the renal canaliculi of *Perca fluviatilis*, i, 688.
- Mansuri, Q. A.** See **G. Tammann**.
- Manthe, G.** See **W. Wislicenus**.
- Manzov, S. J.** See **W. M. Rodionov**.
- Maquenne, L.**, the composition and constitution of elæostearic acid, i, 260.
the determination of reducing sugars by means of alkaline copper solution, ii, 208.
- Maragliano, E.** See **G. Cuneo**.
- Marais, C. F.** See **G. Tammann**.
- Marcelin, A.**, superficial solutions and the law of gases, ii, 390.
extension of the application of the law of gases to superficial solutions, ii, 594.
- Marchal, (Mlle.) G.**, action of silica and alumina on calcium sulphate, ii, 44.
decomposition of [iron] pyrites by heat, ii, 187.
- Marchlewski, L.**, transformations of chlorophyll in the animal organism, i, 1010.
- Marchlewski, L.**, and **A. Moroz**, absorption of ultra-violet light by organic compounds. II., III., and IV., i, 274, 1006; ii, 440.
the extinction coefficients of aromatic hydrocarbons, ii, 7.
- Marchlewski, L.**, and **Z. Wiewzchowski**, vitamins. I., i, 588.
- Marcusson, J.**, and **F. Böttger**, constitution of melene, i, 601.
- Marcusson, J.**, and **M. Picard**, solid constituents of low-temperature coal tar, i, 387.
- Marden, J. W.** See **R. B. Moore**.
- Mardles, E. W. J.**, peptisation of gelatin by mixed liquids, i, 581.
- Marek, J.** See **J. Meyer**.
- Margosches, B. M.**, and **W. Hinner**, reactivity of iodine towards fats. III. Production of acidity in the reaction and the mechanism of its formation, i, 487.
determination of fumaric and maleic acid by halogenometric methods, ii, 572.
reactivity of iodine towards fats. II. Behaviour of aqueous iodine solutions, ii, 576.
reactivity of iodine towards fats. IV. Behaviour of iodine-iodic acid solutions, ii, 633.
- Margosches, B. M.**, **W. Hinner**, and **L. Friedmann**, action of alcoholic iodine solutions on unsaturated fatty acids and fatty oils; influence of water and potassium iodide on the course of the reaction, i, 823.
hydrocarbons and carbon chlorides. III. Solubility of iodine in chlorinated hydrocarbons of the aliphatic group, ii, 749.
- Margulies, O.**, new organic arsenic compounds, i, 1247.
- Mark, H.**, and **M. Póányi**, space lattice of white tin, ii, 298.
- Mark, H.**, and **K. Weissenberg**, space lattice of triphenylmethane, ii, 449.
- Mark, H.**, and **E. Wigner**, space lattice of rhombic sulphur, ii, 650.
- Mark, H.** See also **H. W. Gonell**, **O. Hassel**, and **H. Hoffmann**.
- Markgraf, H.** See **C. Schall**.
- Markl, R.** See **R. Kremann**.
- Markoff, J.**, decolorisation of ethereal extracts, i, 460.
- Marquardt, M.** See **W. Wislicenus**.
- Marri, M.** See **D. Bigiavi**.
- Mars, E.** See **G. Charrier**.
- Marsh, F. W.**, indicator reaction as a source of error in p_H determinations, ii, 623.
- Marsh, J. K.**, fluorescence spectra. II. Phenol and phenolic ether vapours, ii, 219.
- Marsh, J. K.** See also **W. H. McVicker**.
- Marsh, R. S.**, sulphur content of the tomato, i, 1020.
- Marshall, A. L.**, and **H. S. Taylor**, mechanism of the hydrogen chlorine combination, ii, 103.
- Marston, H. R.**, the azine and azonium compounds of the proteolytic enzymes. I., i, 350.

- Martin, C. J.**, inexpensive furnace for ashing food and excreta in porcelain crucibles, ii, 495.
- Martin, E.** See *W. Herz*.
- Martin, F. J.**, and *R. E. Massey*, nitrification in Sudan soils, i, 1023.
- Martin, J. C.** See *J. S. Burd*, and *D. R. Hoagland*.
- Martin, K. A.** See *W. C. Stadie*.
- Martin, W. S.** See *E. M. Crowther*.
- Martland, M.**, *F. S. Hansman*, and *R. Robison*, phosphoric esterase of blood, i, 1381.
- Martland, M.**, and *R. Robison*, determination of phosphorus in blood, ii, 626.
- Maruoka, K.** See *Y. Nakashima*.
- Marvel, C. S.**, and *F. D. Hager*, Bauer oil, the higher-boiling residue from molasses fusel oil; a source of capric [decoic] acid, i, 608.
- Marvel, C. S.**, and *F. E. Smith*, identification of amines, i, 27.
- Marvel, C. S.**, and *V. du Vigneaud*, pressor anæsthetics. I., i, 1193.
- Marx, T.** See *K. Schaum*.
- Marzella, C.** See *S. Berlingozzi*.
- Masaki, O.**, sensitising action of heat on photographic plates for the infra-red, ii, 807.
- Maschmann, E.**, organic compounds of arsenic. I. Carboxylated aromatic arsenic acids and arseno-compounds, i, 1357.
- Mashino, M.**, preparation of acetone from acetic acid. I., i, 1285.
- Mason, C. W.** See *A. W. Browne*, and *G. B. L. Smith*.
- Mason, O'N.** See *H. F. Lewis*.
- Mason, W.**, and *R. V. Wheeler*, ignition of gases. IV. Ignition by a heated surface; mixtures of the paraffins with air, ii, 747.
- Masriera, M.**, additive products of the phosphineimines, i, 234, 436.
- Masschelein, A.** See *M. H. van Laer*.
- Massey, R. E.** See *F. J. Martin*.
- Massol, A.** See *N. Ferrakis*.
- Masson, I.** See *H. J. E. Dobson*, and *K. J. Isaac*.
- Masucci, P.**, and *G. A. Slothower*, neorobin, i, 528.
- Masumoto, B.** See *S. Komatsu*.
- Mathews, J. H.**, and *B. W. Rowland*, thermochemistry of protein behaviour, i, 683.
- Mathews, J. H.**, and *A. J. Stamm*, adsorption and surface tension at liquid-liquid interface, ii, 663.
- Mathews, J. H.**, and *E. V. Williamson*, photochemical study of acetylchloroaminobenzene, ii, 10.
- Mathews, J. H.** See also *B. H. Carroll*, *H. P. Higley*, and *W. A. Koehler*.
- Mathur, K. K.** See *S. S. Bhatnagar*.
- Matignon, C.**, new reaction producing strontium, ii, 44.
- action of high temperatures on some refractory substances, ii, 48.
- heat of formation of sodium silicate, ii, 174.
- Matignon, C.**, and *C. Faurholt*, synthesis of oxalic acid, i, 1035.
- Matile, P.** See *M. de Montmollin*.
- Matsuoka, K.** See *O. Meyerhof*.
- Matsuzaki, T.** See *Y. Asahina*.
- Matter, O.**, glycol ethers of certain aromatic nitrohydroxy-compounds, i, 1063.
- nitrophenyl ethers and their halogen substitution products, i, 1303.
- Matthews, (Mrs.) A.**, partial sterilisation of soil by antiseptics, i, 480.
- Matthews, M. A.** See *E. de B. Barnett*.
- Mattill, H. A.**, *J. S. Carman*, and *M. M. Clayton*, nutritive properties of milk. III. Effectiveness of the X-substance in preventing sterility in rats on milk rations high in fat, i, 1389.
- Mattis, H.** See *A. Bömer*.
- Matula, V.**, anthocyanin as an indicator for acidimetry, ii, 496.
- Matulke, O.** See *F. Kirchhof*.
- Matysiak, S.**, hydrolytic product of chlorophyll containing iron, i, 1092.
- Matzner, M. J.** See *A. F. Hess*.
- Maubert, A.**, *L. Jaloustre*, *P. Lemay*, and *C. Guilbert*, influence of X-rays on the catalase of liver, i, 808.
- Mauguin, C.**, crystalline structure of corundum and hæmatite, ii, 340.
- arrangement of atoms in calomel crystals, ii, 588.
- Maurer, E.**, and *F. Stäblein*, free and pearlitic cementite, ii, 764.
- Maurer, H.** See *W. Küster*.
- Maurer, K.** See *H. H. Schlubach*.
- Maurin, See Aversenq.**
- Maunther, F.**, synthesis of depsides of isoterulic acid [3-hydroxy-4-methoxycinnamic acid], i, 400.
- synthesis of *m*-dimethoxyphenyl ethyl and methyl ketones, i, 524.
- Mawas, J.**, effect on phenols and their derivatives of oxydases of melanotic tumours in chorioidea, i, 696.
- May, F.** See *G. Scheibe*.
- May, H. L.** See *G. E. M. Jauncey*.
- Mayer, A.**, and *L. Plantefol*, equilibrium of the cellular constituents and intensity of the oxidations of the cell; inhibition and oxidation; case of reviviscent plants, i, 809.

- Mayer, A.** See also *M. Gompel*.
Mayer, E. See *E. Fromm*.
Mayer, F., mother substance of Indian-yellow, i, 669.
Mayer, F., and L. van Zütphen, synthesis of 4-ketochroman [chromanone] i, 410.
 hydroxyhydrindone and chromanone, i, 524.
Mayer, J. E. See *D. F. Smith*.
Mayer, J. L., a source of error in employing magenta-sulphurous acid solution as a test for formaldehyde in ethyl alcohol, ii, 210.
Maynard, J. L., direct mercurisation of benzene and the preparation of mercury diphenyl, i, 1005.
Mayr, A. See *J. Lindner*.
Mayr, C., analysis of chlorosulphonic acid, ii, 625.
 determination of arsenic in pyrites, sulphuric acid, and hydrochloric acid, ii, 781.
Mayr, C., and J. Peyfuss, determination of sulphite and thiosulphate by oxidation with nascent bromine, ii, 56.
Mayr, C., and I. Szentpaly-Peyfuss, volumetric determination of dithionic acid in presence of sulphurous and thiosulphuric acids, by oxidation with bromine in the nascent state, ii, 201.
Mazourewitch, H., preparation of phenylcarbamyldiazones of cyclohexenones, i, 969.
 action of aromatic amines on semicarbazide hydrochloride, i, 1297.
Mazume, T., and K. Kino, determination of bromine in organic compounds, ii, 122.
Mazume, T. See also *G. Kita*.
Mazzetti, C., thermal dissociation of certain carbonates, ii, 853.
Mazzetti, C., and F. de Carli, reactivity in the solid state of boric anhydride with metallic oxides, ii, 758.
Mazzucchelli, A., and L. Tonini, electrolytic preparation of antimony-copper and antimony-bismuth alloys, ii, 119.
Mecke, R., band spectra, ii, 3.
 interpretation of the quantum theory, ii, 213.
Mecke, R., and H. Ley, validity of Beer's law for copper sulphate solutions, ii, 656.
Mecke, R., and P. Lindau, structure of the second positive group of nitrogen bands, ii, 510.
Mederhoff, P., excretion of uric acid in the urine of dogs, i, 909.
Medrano, L. See *A. García Banús*.
Meek, W. See *K. K. Chen*.
Meeker, W. R., and E. B. Frazer, comparative toxicity of novocaine, neocaine, procaine, and apothesine; effect of intravascular injections, i, 1377.
Meerwein, H., and L. Gérard, intramolecular displacements of atoms. I. Addition of alcohols to camphene, i, 186.
Meerwein, H., and F. Monforte, [intramolecular displacements of atoms]. III. Racemisation phenomena in the camphor series, i, 191.
Meerwein, H., and R. Wortmann, [intramolecular displacements of atoms]. II. Camphor dichloride; [2:2-dichlorocamphane], i, 188.
Meesmaecker. See *Morvillez*.
Meester, W. A. T. de. See *E. Cohen*.
Meggers, W. F., vanadium multiplets and the Zeeman effect, ii, 365.
 standard wave-lengths and regularities in the spectrum of the iron arc, ii, 801.
Meggers, W. F., and C. C. Kiess, interferometer measurements of longer waves in the iron arc spectrum, ii, 577.
Meier, R., formation of methæmoglobin. III, i, 229.
Meier, R. See also *W. Heubner*.
Meigen, W., and O. Range, determination of hydroxyl values [of oils and fats] by Normann's method, ii, 130.
Meigen, W., and I. Schnerb, oxidation of tartaric acid by potassium permanganate and hydrogen peroxide, ii, 506.
Meinecke, E. See *W. Biltz*.
Meinecke, H. See *J. Tröger*.
Meis, H. See *J. Meisenheimer*.
Meisenburg, K. See *W. Schulemann*.
Meisenheimer, J. [with *L. Angermann, H. Holsten, and E. Kiderlen*], stereochemistry of saturated tervalent nitrogen. IV. Complex compounds of chromium and cobalt with aliphatic and aromatic amines, i, 1035.
Meisenheimer, J., L. Angermann, O. Finn, and E. Vieweg, stereochemistry of saturated tervalent nitrogen. VI. Attempts to prepare optically active compounds of tervalent nitrogen, i, 1299.
Meisenheimer, J., and A. Diedrich, isomeric acylindazoles of K. von Auwers, i, 1347.
Meisenheimer, J., and W. Lamparter, the Beckmann transformation. II, i, 432.
Meisenheimer, J., and H. Lange, the Beckmann transformation. III, i, 433.

- Meisenheimer, J.**, and **H. Meis**, the Beckmann transformation. IV., i, 433.
- Meissner, K. L.** See **W. Sander**.
- Meissner, K. W.**, Lyman "ghosts" and measurements in the infra-red spectrum of neon, ii, 363.
- Meissner, T.** See **K. von Auwers**.
- Meitner, L.**, a possible interpretation of the continuous β -ray spectrum, ii, 12.
important conclusion from the Compton effect, ii, 368.
- Melchior, H.**, occurrence of inulin in the leaves of *Marcgraviaceae*, i, 1019.
- Mellon, M. G.**, evaporation of solutions and liquids in burettes, ii, 622.
- Mellon, M. G.**, and **V. N. Morris**, electrometric titration of boric acid in presence of polyphenols and organic acids, ii, 781.
- Melms, F.** See **W. Wislicenus**.
- Mélon, L.** See **H. Fredericq**.
- Memmen, F.** See **R. Willstätter**.
- Memmesheimer, A.** See **R. Höber**.
- Ménager, (Mlle.) Y.**, use of sodium chloride as standard in analyses of sea-water, ii, 869.
- Ménager, (Mlle.) Y.** See also **(Mlle.) J. Lelièvre**.
- Menaul, P.**, the physiological effect of gossypol, i, 350.
chemical analysis of *Jatropha stimulos*, i, 478.
determination of tannin in plant tissue, ii, 360.
- Mendel, L. B.** See **T. B. Osborne**.
- Menner, E.** See **Robert Schwarz**.
- Menschutkin, B. N.**, substitution reactions in organic chemistry, i, 1.
- Menzel, F.** See **W. Guertler**.
- Menzies, R. C.**, and **R. Robinson**, synthesis of ψ -pelletierine, i, 1335.
- Menzies, R. C.**, and **E. M. Wilkins**, application of thallium compounds in organic chemistry. I. Thallous hydroxide, i, 704.
- Merck, E.**, preparation of synthetic *d*- and *l*- ψ -cocaine, i, 870.
nitrogenous derivative of diisopropylidene glucose, i, 1045.
- Mergenthaler, E.** See **R. Weinland**.
- Merlau, O.** See **E. Heuser**.
- Merrill, A. T.**, relation of p_H to tungstic acid precipitation of protein, i, 895.
- Merrill, G. P.**, stony meteorite from Anthony Harper County, Kansas, and a recently found meteoric iron from Mejillones, Chili, ii, 692.
meteoric iron from Four Corners, San Juan County, New Mexico, ii, 693.
- Merrill, H. B.** See **J. H. Hildebrand**.
- Merrill, J. A.** See **C. L. A. Schmidt**.
- Merz, O.** See **A. Eibner**.
- Messerknecht, C.** See **W. Biltz**.
- Messmer, E.** See **K. Hess**.
- Mestrezat, M.**, and **(Mlle.) M. Janet**, device for regulating thermostats, ii, 670.
- Metcalfe, E. P.**, and **B. Venkatesachar**, selective absorption by luminous mercury vapour, ii, 439.
- Metschl, J.**, supersaturation of gases in water and certain organic liquids, ii, 726.
- Metz, L.** See **L. Wöhler**.
- Metzner, P.**, photodynamic phenomena. III. Fixation of active dyes in the cell, i, 1262.
- Meulen, H. ter**, and **J. Heslinga**, new methods of determining chlorine, bromine, and iodine in organic compounds. I. Hydrogenation method, ii, 55.
- Meulen, P. A. van der**, and **W. Rieman**, unimolecular films of sodium ricinoleate in emulsions, ii, 389.
- Meulenhoff, J.** See **J. Böeseken**.
- Meuly, W.**, the influence of sulphonic groups on the colour of azo-dyes, i, 220.
- Meunier, L.**, and **E. Desparmet**, preparation of acetylenic hydrocarbons, their sodium derivatives, and the corresponding acetylenic acids, i, 701.
- Meuwssen, A.** See **O. Hönigschmid**, and **E. Zintl**.
- Mevius, W.**, chemonastia of *Drosera rotundifolia*. I., i, 1392.
- Meyer, C. F.**, and **D. W. Bronk**, structure of the absorption bands of certain organic gases and vapours in the near infra-red, ii, 804.
- Meyer, E.** See **A. Thiel**.
- Meyer, E. H. L.**, dielectric constants and chemical constitution of organic liquids, ii, 515.
- Meyer, G. M.** See **P. A. Levene**.
- Meyer, H.**, action of carbon dioxide on phenoxides, i, 847.
- Meyer, H.** [with **W. Schmidt, L. Steinmetzer**, and **R. Grim**], aromatic sulphonic acids and sulphones, i, 27.
- Meyer, H. O.**, synthesis of nitranilic acid, i, 406.
- Meyer, J.**, and **R. Backa**, tervalent vanadium. I., ii, 558.
- Meyer, J.**, and **H. Bratke**, double selenides, ii, 550.
- Meyer, J.**, and **J. Marek**, tervalent manganese. V., ii, 555.
- Meyer, J.**, and **W. Schramm**, tervalent manganese. IV., ii, 264.

- Meyer, J., and H. Wilk**, thallic sulphates and thallic selenates, ii, 259.
- Meyer, J.** See also *L. Ruzicka*.
- Meyer, K. F.** See *C. C. Dozier*, and *E. Wagner*.
- Meyer, P. G.** See *H. Staudinger*.
- Meyer, R., and E. Funke**, benzeins. III., i, 1190.
- Meyer, R., and W. Gerloff**, benzeins, i, 509.
- Meyer, W. B.** See *P. Rona*.
- Meyer-Bisch, R.**, sulphuric acid content of body fluids in normal and pathological conditions, i, 1132.
- Meyerhof, O.**, a new autoxidisable system of the cell, i, 118.
- Meyerhof, O., H. E. Himwich, and K. Matsuoka**, lactic acid formation in muscular contraction, i, 1128.
- Meyerhof, O., and K. Matsuoka**, mechanism of the oxidation of lævulose in phosphate solutions, i, 1045.
- Michaelis, A. M.**, clinical calorimetry. XXXVI. A graphic method of determining certain numerical factors in metabolism, i, 682.
- Michaelis, L., and H. Davidsohn**, purification of toxins, ferments, and other active biological organic colloids, i, 464.
- Michaelis, L., and A. Domboviceanu**, cataphoresis of mastic sol, ii, 738.
- Michaelis, L., and M. Mizutani**, determination of *pH* with one-colour indicators in alcoholic solutions, ii, 623.
- Michaelis, L., and T. Nakashima**, a further method of determining the isoelectric point of proteins and its application to the serum-albumins of various animals, i, 228.
- Micheel, F.** See *W. Weltzien*.
- Michel Durand, E.**, state of tannins in the vegetable cell, i, 477.
- Mickwitz, A., and G. Landesen**, the formation of the green manganous sulphide, ii, 186.
- Middendorp, J. A.**, hydroxymethyl-furfuraldehyde, i, 976.
- Middleton, A. R.** See *F. J. Allen*.
- Middleton, E. B.**, the addition of mercuric salts to $\alpha\beta$ -unsaturated ketones, i, 291.
- Middleton, H. E.** See *P. L. Gile*.
- Miedel, H.** See *H. H. Schlubach*.
- Miekeley, A.** See *M. Bergmann*.
- Mields, M.** See *E. Koenigs*.
- Mielke, H.** See *F. Rinne*.
- Mieses, R.**, the specific ash of proteins, i, 100.
- Miethe, A., and H. Stammreich**, quantitative detection of minute quantities of precious metals in mercury, ii, 874.
- Migliacci, D.** See *A. Piutti*.
- Mignon, H. L.**, protein and vitamin-A content of the English walnut, i, 596.
- Migrdichian, V.** See *T. R. Briggs*.
- Mihăilescu, M. A., and L. Florescu**, *s-N*-aminophthalimide, i, 1070.
- Mihăilescu, M. A., and A. Steopoe**, the action of nitric acid on naphthalic anhydride, i, 43.
- Mikawa, Y.**, action of uranyl acetate. III. Action on red blood-corpuscles, i, 1124.
- action of uranyl acetate. II. Action on various enzymes, i, 1148.
- Mikeska, L. A.** See *P. A. Levene*.
- Mikscha, R.** See *L. Moser*.
- Mildbrand, H.** See *H. O. L. Fischer*.
- Milkovitch, G.**, nature of the anti-hæmolytic property of heated sera, i, 681.
- Millard, W. F.** See *F. E. Francis*.
- Miller, D. W.** See *C. Voegtlin*.
- Miller, E.** See *F. E. Bartell*.
- Miller, E. C.**, daily variation of the carbohydrates in the leaves of corn [maize] and the sorghums, i, 1021.
- Miller, E. C.** See also *W. L. Lashaw*.
- Miller, E. J.**, adsorption by activated sugar charcoal. I. Proof of hydrolytic adsorption, ii, 664.
- Miller, H. E.** See *W. C. Bray*.
- Miller, L. B.**, composition of the precipitate from partially alkalinised alum solutions, ii, 48.
- Miller, R. C.** See *C. H. Hunt*.
- Milletti, F.** See *F. Traetta-Mosca*.
- Milligan, C. H., J. T. Chappell, and E. E. Reid**, esterification in presence of silica gel, ii, 667.
- Milligan, C. H., C. A. Knuth, and A. S. Richardson**, the composition of whale oil, i, 260.
- Milligan, C. H.** See also *A. S. Richardson*.
- Milligan, E. S.** See *L. A. Congdon*.
- Milligan, L. H.**, solubility of gasoline (hexane and heptane) in water at 25°, ii, 726.
- spiral gas-washing bottle, ii, 776.
- determination of reduction products of free nitric acid solutions, ii, 779.
- Milligan, L. H., and G. R. Gillette**, reduction of free nitric acid by ferrous, stannous, or titanous salts, ii, 605.
- Millikan, R. A.**, atomism in modern physics, ii, 577.

- Millikan, R. A.**, and **I. S. Bowen**, extreme ultra-violet spectra, ii, 214.
 assignment of lines and term values in beryllium II and carbon IV., ii, 639.
 some conspicuous successes of the Bohr atom and a serious difficulty, ii, 710.
- Millikan, R. A.** See also **I. S. Bowen**.
- Mills, W. H.**, and **R. C. Odams**, cyanine dyes. VIII. Synthesis of a 2:4'-carbocyanine; constitution of the dicyanines, i, 1237.
- Milroy, T. H.** See **S. Andrews**.
- Minaev, M.** See **M. Samec**.
- Minaev, V. I.**, chloro- and amino-anthracoumarins, i, 305.
- Minaev, V. I.**, and **K. M. Ripper**, the methods of preparation of 6-chloro-3-hydroxybenzoic acid, i, 286.
- Mingoia, Q.** See **G. Charrier**.
- Minich, J.**, determination of the residual nitrogen in the blood, ii, 57.
- Mion, P.** See **L. Gay**.
- Miravalles, R.** See **E. Moles**.
- Mirsky, A. E.** See **M. L. Anson**.
- Mirtl, K. H.** See **A. Skrabal**.
- Mishima, T.** See **H. Nagaoka**.
- Mislowitzer, E.** See **P. Rona**.
- Misra, L.** See **R. L. Datta**.
- Mitchell, A. D.**, hypophosphorous acid. VI. Reaction with chromic acid, ii, 332.
 reaction between phosphorous acid and mercuric chloride, ii, 472.
- Mitchell, C. A.**, osmium tetroxide as a reagent for the determination of tannins and their derivatives, ii, 356.
- Mitchell, H. H.**, method of determining the biological value of protein, i, 453.
 biological value of proteins at different levels of intake, i, 453.
 supplementary relations among proteins, i, 453.
- Mitchell, H. H.** See also **T. S. Hamilton**.
- Mitchell, M. L.**, substitution of taurine for cystine in the diet of mice, i, 685.
- Mitchell, T. C.** See **R. M. Caven**.
- Miyagawa, I.** See **R. Majima**.
- Mizutani, M.** See **L. Michaelis**.
- Mlodziejevski, M.**, ammonium oleate, i, 485.
- Mlodziejowski, A.**, formation of liquid crystals of mixtures of cholesterol and cetyl alcohol, i, 167.
- Moates, G. H.**, and **J. J. Keegan**, sugar in the cerebrospinal fluid, i, 687.
- Mochizuki, N.**, blood-sugar of rabbits under various conditions, i, 1124.
- Moczala, J.** See **O. Ruff**.
- Möllenhoff, E.**, hexagonal crystals of horse hæmoglobin, i, 1362.
- Moeller, A.** See **K. Schaum**.
- Moeller, W.**, adsorption of amino-acids by animal tissues, i, 450.
- Mörner, C. T.**, molecular stability of acetic-choleic acid, i, 1133.
- Moers, K.** See **R. Gross**.
- Moesveld, A. L. T.** See **E. Cohen**.
- Mohler, F. L.**, evidence of a spark line in the lithium spectrum, ii, 365.
- Mohler, F. L.**, and **P. D. Foote**, stages in the development of the iodine spectrum and related critical potentials, ii, 808.
- Mohler, F. L.** See also **A. E. Ruark**.
- Mohler, L. F.** See **A. E. Ruark**.
- Mohnhaupt, W.** See **H. P. Kaufmann**.
- Mohr, E.**, Baeyer's "strain-theory" and the structure of diamond, ii, 588.
- Moir, J.**, the African poison, acocantherine, i, 758.
 colour and molecular geometry. II. Explanation of the results of Chatterway and Clemo, i, 1076.
 colour and molecular geometry, ii, 641.
- Mokagnatz, M.** See **G. Bertrand**.
- Mokroushin, S.**, determination of molecular diameters from surface tension measurements, ii, 820.
- Moldenhauer, W.**, Maxted's synthesis of ammonia at high temperatures, ii, 248.
 synthesis of ammonia at high pressures, ii, 404.
 [burette for] gas analysis, ii, 622.
- Moles, E.**, and **J. M. Clavera**, revision of the atomic weight of sodium, ii, 174.
 standard density of nitrogen, ii, 452.
- Moles, E.**, and **C. Diaz Villamil**, thermal decomposition of calcium oxalate, i, 831.
- Moles, E.**, and **R. Miravalles**, contraction of evacuated bulbs in the determination of the density of gases, ii, 451.
- Moles, E.**, and **R. Portillo**, bismuth oxalates, i, 9, 831.
 hydrate of bismuth lactate, i, 610.
- Molhan, A.**, detection and determination of β -hydroxybutyric acid and dextrose in diabetic urine, ii, 632.
 micrometric apparatus for the determination of urea in blood and other pathological products which contain very small quantities, ii, 634.
- Molliard, M.**, formation of organic acids by *Sterigmatocystis nigra* [*Aspergillus niger*] in unbalanced media, i, 249.

- Moloney, P. J.**, and **D. M. Findlay**, concentration of insulin by adsorption on benzoic acid, i, 108.
 purification of insulin and similar substances by sorption on charcoal and subsequent recovery, ii, 394.
- Mommsen, E. T.** See **F. Foerster**.
- Mond, E.**, and **C. Heberlein**, supposed existence of copper carbonyl, ii, 554.
- Mond, R.**, mode of occurrence of proteins in plasma and serum. I. Are serum proteins combined with alkalis? i, 114.
 effect of ultra-violet rays on protein solutions, i, 438.
- Mondain-Monval, P.**, law of solubility of salts, ii, 389.
- Monforte, F.** See **F. Angelico**, and **H. Meerwein**.
- Monk, G. S.** See **H. G. Gale**.
- Monosson, M.** See **A. Bach**.
- Monroe, K. P.** See **C. S. Hudson**.
- Montagne, P. J.**, molecular transformations. XIV. Action of acetyl chloride on 4:4':4'':4'''-tetrabromobenzopinacene; contribution to the problem of affinity, i, 1309.
- Montemartini, C.**, and **L. Losana**, reaction between hydrogen chloride and nitrides. I., ii, 764.
 action of hydrogen chloride on calcium cyanamide; determination of nitrogen in calcium cyanamide, ii, 784.
- Montgomery, E.** See **R. Adams**.
- Montgomery, E. G.** See **W. R. Fearon**.
- Montmollin, F. de.** See **J. Piccard**.
- Montmollin, M. de**, and **P. Matile**, derivatives of Δ^{α} -butylene, i, 360.
- Moor, W. O.**, presence of a hitherto undescribed form of urea in human urine, i, 1134.
 the quantitative preparation of urea from human urine, ii, 210.
- Moore, B. E.**, excitation stages in the open arc-light spectra. III. Lead, mercury, thallium, magnesium. IV. Hydrogen, air, water-vapour, pressure effect, mixed electrodes, ii, 284.
- Moore, C. M.** See **A. Lowry**.
- Moore, H. R.**, and **W. A. Noyes, jun.**, photochemical studies. II. Activation of a mercury surface by light; possible relation between photoelectric effect and photochemical action, ii, 748.
- Moore, J. A.** See **R. Forsyth**.
- Moore, R. B.**, **S. C. Lind**, **J. W. Marden**, **J. P. Bonardi**, **C. W. Davis**, and **J. E. Conley**, analytical methods for certain metals, including cerium, thorium, molybdenum, tungsten, radium, uranium, vanadium, titanium, and zirconium, ii, 502.
- Moore, R. W.** See **L. M. Dennis**.
- Mooy, W. J. de.** See **G. H. Leepold**.
- Moquet, (Mlle.) L.** See **H. Bierry**, and **L. Lescœur**.
- Moran, W. H.** See **W. G. France**.
- Morand, M.**, spectra emitted by the stoppage of positive rays of lithium, ii, 437.
 spectrum of ionised lithium, ii, 509.
 new spectra of the neutral lithium atom, ii, 577.
- Morávek, V.**, chemical sorption, ii, 392.
- More, J.**, oxidation of uric acid by iodine in alkaline solution, i, 333.
- Morgan, G. T.**, and **A. R. Bowen**, residual affinity and co-ordination. XVIII. Interaction of zirconium salts and β -diketones, i, 1079.
- Morgan, G. T.**, **E. A. Cooper**, and **A. W. Burt**, bactericidal action of the tellurium derivatives of aliphatic β -diketones. II., i, 591.
- Morgan, G. T.**, and **H. D. K. Drew**, residual affinity and co-ordination. XVII. Stannic derivatives of β -diketones, i, 369.
 residual affinity and co-ordination. XIX. Interactions of germanium tetrahalides and β -diketones, i, 941.
cyclotelluropentanediones and *cyclo-telluripentanedione* dihalides, i, 1044.
- Morgan, G. T.**, and **H. D. K. Drew** [with **C. R. Porter**, and **I. Ackerman**], interaction of tellurium tetrachloride and the higher β -diketones. I., i, 493.
- Morgan, G. T.**, and **T. Glover**, *o*-chlorodinitrotoluenes. V. 2-Chloro-3:6-dinitrotoluene, i, 1056.
- Morgan, G. T.**, and **E. Holmes**, interaction of tellurium tetrachloride and the higher β -diketones. III., i, 496.
- Morgan, G. T.**, and **J. E. Moss**, the aminoacetophenones as colour intermediates, i, 57.
- Morgan, G. T.**, and **C. R. Porter**, action of selenium tetrachloride on di- and tri-ketones; selenium phenylacetyl- and β -phenylpropionyl-acetones, i, 1079.
- Morgan, G. T.**, and **J. D. M. Smith**, residual affinity and co-ordination. XX. Chromic and cobaltic lakes of mordant azo-dyes, i, 1359.
 residual affinity and co-ordination. XXII. Optically active salicylato-cobalt diethylenediammines, i, 1359.
- Morgan, G. T.**, and **R. W. Thomason**, interaction of tellurium tetrachloride and the higher β -diketones. II., i, 495.

- Morgan, G. T., and R. B. Tunstall**, residual affinity and co-ordination. XXI. Boron β -diketone difluorides, i, 1359.
- Morgan, G. T.** See also (*Sir*) **W. H. Bragg**.
- Morgan, H. J., and O. T. Avery**, growth-inhibitory substances in *Pneumococcus* cultures, i, 915.
- Morgan, H. J.** See also **O. T. Avery**.
- Morgan, J. L. R., and O. M. Lammert**, purification and physical constants of acetophenone, i, 742.
- electrical conductance of solutions of the alkali halides in acetophenone, ii, 656.
- Morgan, J. L. R., O. M. Lammert, and R. H. Crist**, photochemical reactions in solutions of the alkali halides in acetophenone, i, 1077.
- Morgan, R.** See **H. F. Lewis**.
- Morgan, S. O.** See **H. H. Lowry**.
- Morgulis, S., and A. C. Edwards**, chemical changes in the blood during fasting and subsequent re-feeding, i, 1364.
- Mori, J.**, equilibrium of iodine and sulphur in carbon disulphide solution, ii, 26.
- Moriarty, M. E.** See **F. B. Talbot**.
- Morinaka, K.**, phosphorus metabolism in avitaminosis, i, 244.
- Morinaka, K.** See also **K. Felix**.
- Morio, S.** See **R. Majima**.
- Morley, A. M., and J. K. Wood**, volumetric determination of titanium, ii, 351.
- behaviour of titanate acid towards hydrochloric acid, ii, 689.
- Moroz, A.** See **L. Marchlewski**.
- Morrell, R. S.**, theory of polymerisation in fatty oils. II., i, 1034.
- Morris, V. N.** See **M. G. Mellon**.
- Morrison, A. B.** See **G. F. White**.
- Morrison, F. R.** See **A. R. Penfold**.
- Morrow, C. A.** See **J. J. Willaman**.
- Morse, J. K.**, crystal structure of benzene, ii, 815.
- Mortimer, E.** See **C. W. McClure**.
- Mortimer, F. S., and R. V. Murphy**, the vapour pressures of some substances found in coal-tar, ii, 17.
- Morton, R. A.** See **E. C. C. Baly**.
- Morvillez, and R. Meesmaecker**, iodometric determination of thiosinamine; comparison with other methods, and applications, ii, 211.
- determination of allylthiocarbimide [in mustard], ii, 793.
- Moschini, A.** See **E. Abderhalden**.
- Moschkin, P. A.** See **A. E. Tschitschibabin**.
- Mosemann, M.** See **L. Rosenthaler**.
- Moser, L.**, determination of rare metals, and their separation from other metals. III. The separation of uranium from titanium, iron, and aluminium, ii, 65.
- Moser, L., and M. Behr**, determination of metals of the ammonium sulphide group by hydrogen sulphide under pressure, ii, 503.
- Moser, L., and A. Brukl**, solid arsenic hydrides, ii, 851.
- Moser, L., and R. Herzner**, the preparation of pure ammonia, ii, 38.
- absorption of nitric oxide by solutions of ferrous sulphate and sodium sulphite, ii, 545.
- Moser, L., and F. Lindinger**, the preparation of pure ethylene, i, 2.
- Moser, L., and R. Miksch**, determination and separation of rare metals from other metals. IV. Volumetric determination of tellurium and its gravimetric separation from selenium, ii, 698.
- Moser, L., and M. Niessner**, use of hypophosphorous acid in gravimetric analysis. II. Determination of mercury, gold, and palladium, and a method of separating them from other metals, ii, 204.
- Moses, B. L.** See **H. J. Stander**.
- Mosettig, E.** See **E. Späth**.
- Mosimann, P.** See **F. Ephraim**.
- Mosonyi, J.**, chemical and physico-chemical changes in blood in experimental nephritis, i, 1374.
- Moss, J. E.** See **G. T. Morgan**.
- Mothes, W.** See **H. Wieland**.
- Moulton, C. R.** See **W. S. Ritchie**.
- Moureu, C., and R. Chaux**, preparation of β -chloropropionic acid, i, 1281.
- Moureu, C., and C. Dufraisse**, autoxidation and anti-oxygen action. IX. Catalytic properties of sulphur and its compounds, ii, 602.
- Moureu, C., C. Dufraisse, and M. Badoche**, autoxidation and anti-oxygen action. X. Catalytic properties of sulphur and its compounds; generalisation of the phenomenon, ii, 841.
- Moureu, C., C. Dufraisse, and J. P. des Touches**, autoxidation and anti-oxygen action; catalytic properties of iodophenols, i, 635.
- Moureu, C., and M. H. Schindler**, $\alpha\beta$ -dihalogenated amylacrylic acids, i, 607.
- Moureu, H.** See **C. Dufraisse**.
- Moyle, D. M.**, succinic acid in muscle. I., i, 791.

- Muchlinski, A.** See *H. von Wartenberg*.
- Muehlberger, C. W.** See *A. G. Young*.
- Müllbauer, F.** See *R. Willstätter*.
- Müller, A.,** odour and chemical constitution, i, 1280.
- Müller, E.** See *F. Honcamp*.
- Müller, Erich,** electrometric investigation of the reaction between thiosulphate and silver nitrate, ii, 481.
electrometric titration of hydroferri-cyanic acid with potassium iodide, ii, 634.
electrometric titration of chlorides, ii, 777.
- Müller, Erich, and A. Flath,** electrometric determination of vanadium, and uranium, separately, in the presence of one another, and in the presence of iron, ii, 66.
- Müller, Erich, and W. Low,** electrometric determination of formaldehyde, ii, 706.
- Müller, Erich, and Friedrich Müller,** catalytic decomposition of formic acid, ii, 844.
- Müller, Erich, and W. Schluttig,** electrometric titration of nickel and cobalt with potassium cyanide, ii, 704.
- Müller, Erich, and O. Wahle,** the simultaneous electrometric determination of iron and manganese, ii, 64, 277.
- Müller, Erich, and R. Wertheim,** electrometric determination of soluble sulphates, ii, 564.
electrometric determination of barium in presence and absence of calcium, ii, 568.
- Müller, Ernst,** "alcoholic fermentation" of formaldehyde by osmium. II., i, 833.
- Müller, Ernst, and H. Barck,** decomposition of nitric oxide by heating with metals, ii, 38.
formation of manganese carbide from carbon dioxide and manganese, ii, 49.
- Müller, Ernst, and H. Kraemer-Willenberg,** the hydrogenating, reducing, and oxidising action of hydrazine on organic compounds, i, 502.
- Müller, Ernst, and W. Wagner,** separation of phosphates from fluorides, ii, 58.
- Müller, Friedrich.** See *Erich Müller*.
- Müller, Franz** [properties of alums], ii, 828.
- Müller, F. C. G.,** combustion of charcoal in oxygen, ii, 674.
- Müller, G.** See *A. Zinke*.
- Müller, H.,** a volumetric micro-method for the determination of sodium, ii, 123.
iodometric determination of sodium, ii, 701.
- Müller, J.** See *R. Tobler*.
- Müller, Joachim.** See *H. Fischer*.
- Müller, Joh.** See *W. König*.
- Mueller, J. Howard,** new sulphur-containing amino-acid isolated from the hydrolytic products of protein. II. Sulphur excretion after ingestion, i, 438.
- Müller, John H.,** germanium in smithsonite and mine waters, ii, 561.
- Müller, K.** See *O. Fischer*.
- Müller, M.** See *A. Guthier*.
- Müller, R., and O. Benda,** electrometric titration of mercury with ammonium thiocyanate, ii, 502.
- Müller, R., and W. Knaus,** the electromotive behaviour of magnesium and magnesium amalgams, ii, 150.
- Müller, W.** See *K. von Auwers*.
- Müller, Walter.** See *H. E. Fierz-David*.
- Müller, Wilhelm.** See *W. Schneider*.
- Müller, W. J.,** passivity, ii, 743.
- Müller-Bardoff, K.** See *G. Heller*.
- Müller-Goldegg, G.** See *A. Sieverts*.
- Müncker, K.** See *J. von Braun*.
- Münnich, O.** See *H. Ley*.
- Münter, F.,** the effect of physiologically acid and alkaline nitrogenous fertilisers, i, 356.
- Muha, K.** See *A. Klemenc*.
- Mukerji, B. C.** See *H. Gault*.
- Mukherjee, J. N., and S. G. Chaudhuri,** influence of anions on the coagulation of negatively charged suspensoids, ii, 395.
- Mukherjee, J. N., and S. K. Majumdar,** kinetics of the process of coagulation of colloids in the light of Smoluchowski's theory, ii, 395.
- Mukherjee, J. N., and B. C. Roy,** electro-osmotic experiments on the reversal of the electric charge of colloids and precipitates and the preparation of stable sols with a charge opposite in sign to that commonly obtained, ii, 313.
- Muldoon, J. A., G. T. Shiple, and C. P. Sherwin,** synthesis of amino-acids in the animal organism. III. Cystine, i, 787.
- Muldoon, J. A.** See also *G. J. Shiple*.
- Mullaly, J. M.,** measurements of gaseous diffusion, ii, 519.
- Mulliken, R. S.,** the vibrational isotope effect in the band spectrum of boron nitride, ii, 3.

- Mulliken, R. S.**, isotope effects in the band spectra of boron monoxide and silicon nitride, ii, 294.
isotope effect as a means of identifying emitters of band spectra; metal hydrides, ii, 295.
isotope effect in line and band spectra, ii, 446.
band spectrum of boron monoxide, ii, 640.
- Mumm, O.**, and **K. Brodersen**, the course of the reduction of pyridinecarboxylic acids to nitrogen-free products, i, 82.
- Mumm, O.**, and **G. Hingst**, pyridone-methides[methylenedihydropyridines], i, 83.
- Mumm, O.**, **O. Roder**, and **H. Ludwig**, 1:1'-dialkyltetrahydropyridyls, i, 768.
- Mund, W.**, apparatus for the extraction and purification of radium emanation, ii, 607.
- Mund, W.**, and **P. Herrent**, liquefaction of binary gaseous systems; sulphur dioxide-ethane, ii, 453, 822.
- Mundinger, E.** See **W. Wislicenus**.
- Munford, S. A.** See **R. S. Hubbard**.
- Muntwyler, O.** See **H. Staudinger**.
- Munzert, H.** See **A. Eibner**.
- Murachi, M.** See **T. Nishimura**.
- Murai, J.** See **H. Nomura**.
- Murakami, T.** See **K. Honda**.
- Muramatsu, S.**, natural soaps in soja bean, i, 1033.
- Muraour, H.**, action of sodium sulphite on some trinitro-compounds and on tetranitromethane; purification of tolite [2:4:6-trinitrotoluene], i, 629.
influence of cooling [due to the walls of the container] on the measurement of explosive pressures, ii, 319.
- Murayama, Y.**, and **K. Abe**, the formation of borneols from turpentine oil. I., i, 62.
- Murayama, Y.**, **K. Abe**, and **S. Yamagishi**, the formation of borneols from turpentine oil. II., i, 973.
- Murayama, Y.**, and **T. Itagaki**, saponin of *Panax repens*, Maxim. I., i, 596.
- Murayama, Y.** See also **Y. Asahina**.
- Murlin, J. R.** See **C. P. Kimball**, and **H. A. Piper**.
- Murmann, E.**, reaction between magnesium and calcium salts and rubidium and caesium salts, i, 20.
determination of caesium as perchlorate, ii, 60.
extraction apparatus for liquids, ii, 163.
- Murphee, E. V.** See **W. K. Lewis**.
- Murphy, J. C.** See **D. B. Jones**.
- Murphy, R. V.** See **F. S. Mortimer**.
- Murray, H. A., jun.**, chemical pathology of pyloric occlusion in relation to tetany; chloride, carbon dioxide, and urea concentrations in the blood, i, 583.
- Murray, C. D.**, application of the diffusion hypothesis to membrane potentials, ii, 744.
- Murray, C. D.** See also **A. B. Hastings**.
- Murray, W.**, device for gas-heated thermostats, ii, 246.
- Myers, C. N.** See **J. A. Fordyce**.
- Myers, J. E.** See **E. S. Hedges**.
- Myers, V. C.**, and **L. E. Booher**, variations in the acid-base balance of the blood in disease, i, 781.
- Myrbäck, K.**, inactivation of invertase by heavy metals, i, 593.
inactivation of invertase by amines, i, 594.
dependence of alcoholic fermentation on acidity, i, 1265.
properties of a highly active invertase preparation, i, 1382.
- Myrbäck, K.**, and **H. von Euler**, participation of co-enzyme in the degradation of sugar, i, 1141.
fermentation co-enzyme (co-zymase) of yeast. IV., i, 1141.
- Myrbäck, K.** See also **H. von Euler**.

N.

- Nabenhauer, F. P.** See **R. J. Anderson**, and **M. T. Bogert**.
- Nabot, (Mlle) Y.** See **A. Boutaric**.
- Nachtwey, P.** See **F. Arndt**.
- Nägeli, H.**, and **J. Tambor**, synthesis of 7-ethoxy-4'-dimethylaminoflavone, i, 534.
- Nagai, S.**, preparation of piperonal from isosafrole and α -homopiperonal from safrole by ozone, i, 1077.
- Nagai, S.** See also **Y. Tanaka**.
- Nagaoka, H.**, isotopes of mercury and bismuth and the satellites of their spectral lines, ii, 649.
- Nagaoka, H.**, and **Y. Sugiura**, spectroscopic evidence of isotopic elements, ii, 295.
spectroscopic evidence of isotopy, ii, 798.
regularity in the distribution of the spectral lines of iron and intra-atomic magnetic field, ii, 799.
- Nagaoka, H.**, **Y. Sugiura**, and **T. Mishima**, isotopes of mercury and bismuth revealed in the satellites of their spectral lines, ii, 295.
binding of electrons in the nucleus of the mercury atom, ii, 381.

- Nagaoka, H., Y. Sugiura, and T. Mishima**, fine structure of mercury lines and the isotopes, ii, 798.
- Nagel, W.** See *C. Harries*.
- Nagy, A.**, pipette for microchemical analysis, ii, 774.
- Naik, K. G., and M. D. Avasare**, absorption of halogens by mercurous salts, ii, 48.
- Naito, H.**, the cephalin and lecithin content of the brain in avitaminosis, i, 244.
the lecithin content of the brain and liver of normal and avitaminosed pigeons after forced lecithin feeding, i, 245.
- Nakahayashi, S., and J. Abelin**, changes in blood-sugar. I., i, 1123.
- Nakamura, G.** See *M. Kimura*.
- Nakamura, H.** See *G. Bertrand*.
- Nakamura, K.**, stability of yeast catalase, i, 1264.
- Nakamura, M.**, determination of chloride in bleaching powder, ii, 122.
- Nakao, M., and C. Shibue**, the volatile oil of Manchurian peppermint, i, 64.
- Nakashima, T.** See *L. Michaelis*.
- Nakashima, Y., and K. Maruoka**, colorimetric determination of carbamide, ii, 708.
- Nakayama, S.**, constituents of "hangge," i, 1273.
- Nakazato, T.** See *H. Kondo*.
- Nametkin, S.**, mechanism of the action of potassium permanganate on unsaturated compounds, i, 1062.
the camphor and camphenilone series, i, 1084.
the camphenilane series, i, 1084.
- Nametkin, S.** [with (*Miss*) *W. Chochrjakov*, and (*Miss*) *B. Lübovzov*], nitrofenchones and some of their reactions, i, 1085.
- Nametkin, S.** [with *A. Selivanov*, and *A. Ruschentzev*], the xanthate method in the fenchone and isofenchone series, i, 754.
- Nametkin, S., and L. Brüssov**, methylcyclohexane, i, 1176.
- Nametkin, S., and N. Delektovsky**, pinacolin transformation in the dehydration of 1:2-dimethylcyclohexane-1:2-diol, i, 519.
- Nametkin, S., and A. Ruschentzev**, isofenchocarboxylic acid, i, 733.
- Namyslovski, S.** See *A. Korczynski*.
- Nani, A.** See *G. Charrier*.
- Nanji, D. R.**, iodometric method for the determination of nitrogen in osazones, ii, 209.
- Nanji, D. R.** See also *F. J. Paton*.
- Naoum, P., and R. Aufschläger**, ammonium perchlorate, ii, 678.
- Narayan, A. L., and D. Gunnaiya**, absorption of potassium vapour at high temperatures, and satellites accompanying the members of the principal series, ii, 219.
absorption of lithium vapour, ii, 580.
- Narayan, A. L., and K. R. Row**, fluorescence and channelled absorption spectra of bismuth vapour at high temperatures, ii, 804.
- Nardoff, R. von**, refraction of X-rays in iron pyrites, ii, 652.
- Nash, T. P., jun.**, insulin and phloridzin diabetes, i, 446.
- Nash, T. P., jun., and S. R. Benedict**, mechanism of phloridzin diabetes, i, 1260.
- Nash, T. P., jun.** See also *S. R. Benedict*.
- Nason, E. H.**, fractional distillation apparatus, ii, 17.
- Nason, E. H.** See also *A. J. Hill*.
- Nathan, S.** See *S. Goldschmidt*.
- Natta, G.** See *G. R. Levi*.
- Nayar, M. R., and H. E. Watson**, stability of chromates at high temperatures, ii, 492.
- Nayar, M. R., H. E. Watson, and J. J. Sudborough**, reactions of chromates at high temperatures. I. Synthesis and decomposition of calcium, sodium, and magnesium chromates in air, ii, 552.
- Neal, J. L., jun.** See *L. A. Congdon*.
- Neber, P. W., and H. Keppler**, 1-aminoxindole, i, 761.
- Needham, J.**, inositol. II. Synthesis of inositol in the animal body, i, 1371.
- Neergaard, K. von**, determination of silver in molecular solution in presence of colloidal silver, ii, 124.
reversal of the Hofmeister ion series in the swelling of powdered colloid mixtures, ii, 738.
- Negelein, E.**, the reactivity of different amino-acids in the presence of blood charcoal, and of hydrogen peroxide, i, 150.
- Negelein, E.** See also *O. Warburg*.
- Negrete, J.** See *B. A. Houssay*.
- Neill, J. M.** See *O. T. Avery, A. B. Hastings, and D. D. Van Slyke*.
- Nellensteyn, F. J.**, action of iodine on hydrocarbons, i, 358.
- Nelson, E. K.**, non-volatile acids of the peach, i, 1390.
non-volatile acids of the dried apricot, i, 1391.
- Nelson, J. M., and G. Bloomfield**, characteristics of invertase action, i, 800.

- Nelson, J. M.**, and **D. J. Cohn**, invertase in honey, i, 1143.
- Nelson, J. M.**, and **A. M. Collins**, electrolytic introduction of alkyl groups, i, 1307.
- Nelson, J. M.**, and **F. Hollander**, uniformity in invertase action, i, 467.
- Nelson, J. M.**, and **R. W. E. Kerr**, uniformity in invertase action. III. Stability of the enzyme, i, 800.
- Nelson, M. T.** See **R. M. Bethke**, and **S. Lepkovsky**.
- Nelson, V. E.** See **E. I. Fulmer**.
- Némec, A.**, and **K. Kvapil**, intensity of assimilation of atmospheric nitrogen by forest soils, i, 1024.
- Neutzesescu, C.** See **H. Fischer**.
- Nepveux, F.** See **R. Goiffon**, and **M. Labbé**.
- Nesmejanov, A. N.** See **M. A. Rakuzin**.
- Nesselmann, K.**, Wohl's equation of condition, especially with reference to certain thermal values for water vapour, ii, 385.
- Nettleton, L. L.**, effective radii of gas molecules, ii, 375.
- Neubauer, E.**, secretion of bile. III, i, 909.
- Neuberg, C.**, constitution of biochemically formed hydroxyketopropylbenzene, i, 654.
- Neuberg, C.**, and **A. Gottschalk**, formation and origin of acetaldehyde in the intermediate cellular metabolism of warm-blooded animals, i, 785.
- separation and identification of acetaldehyde formed in the intermediary metabolism of surviving cells of warm-blooded animals, i, 785.
- Neuberg, C.**, and **K. Linhardt**, sulphatase. II, i, 107.
- asymmetric enzymic hydrolysis of benzoylated amino-acids, i, 1146.
- Neuberg, C.**, and **J. Noguchi**, enzymic hydrolysis of phenaceturic acid, i, 1145.
- Neuberg, C.**, and **E. Reinfurth**, carboligase. VI. A new type of change of acetaldehyde by fermenting yeast, i, 248.
- relation between hexosemonophosphoric acid and hexosediphosphoric acid, i, 945.
- Neuberg, C.**, and **O. Rosenthal**, the cellase of takadiastase, i, 233.
- takalactase, i, 594.
- relationship of carboligatic synthesis to carboxylatic degradation (application of acetaldehyde as acceptor), i, 1165.
- Neuberg, J.**, metabolism of benzoic acid in the human organism, i, 685.
- Neuberg, J.** See also **I. Snapper**.
- Neuhausen, B. S.**, and **J. E. Breslin**, the influence of chemicals on erythrocyte membranes by changes in corpuscular volume, i, 237.
- Neukirch, E.** See **W. Herz**.
- Neumann, A.**, eosinophile granule substance of the blood and its preparation, nature, and properties. I. Technique of isolation, i, 1253.
- Neumann, B.**, and **H. Richter**, electrolytic deposition of tungsten, ii, 839.
- Neumann, O.** See **A. Eucken**.
- Neumann & Co.**, and **J. Zeltner**, preparation of a 2-phenylquinolinedicarboxylic acid, i, 206.
- Neumann-Spallart, K.**, micro-electrolytic determination of silver and zinc, ii, 783.
- Neureiter, F. von**, microchemical detection of hydrocyanic acid, ii, 75.
- Neuss, O.** See **H. Goldschmidt**.
- Neusser, E.**, use of hexamminenickelous perchlorate in analysis, ii, 351.
- bivalent bismuth. I. and II, ii, 559, 691.
- Neusser, R.** See **A. Kurtenacker**.
- Neuwirth, M.** See **S. Zeisel**.
- Nevvius, W.** See **O. Routala**.
- Newbery, E.**, life period of overvoltage compounds, ii, 317.
- Newcomb, C.**, error due to impure picric acid in creatinine determinations, ii, 576.
- Newitt, D. M.** See **W. A. Bone**.
- Newman, F. H.**, potential gradient in the sodium-potassium vapour arc lamp, ii, 222.
- emission spectra of mixed alkali vapours, ii, 639.
- Newton, R.**, colloidal properties of winter wheat plants in relationship to frost resistance, i, 699.
- Newton, R.**, and **R. A. Gortner**, determination of the hydrophilic colloid content of expressed plant-tissue fluids, ii, 271.
- Newton, W.**, nutrition of the potato plant with special reference to water cultures, i, 923.
- Nicholls, F. H.** See **W. Wardlaw**.
- Nichols, E. L.**, the luminescence of titanium oxide, ii, 81.
- Nichols, E. L.**, and **H. L. Howes**, photoluminescence of flames, ii, 371.
- Nichols, J. B.**, cellulose nitrate and camphor, i, 972.
- Nichols, J. B.** See also **T. Svedberg**.

- Nicholson, W. N.**, and **D. Rhind**, determination of the degree of hydrolysis of gallotannin by tannase, ii, 875.
- Nickels, L.** See **A. J. Allmand**.
- Niclassen, H.** See **J. Böhm**.
- Nieloux, M.**, and **R. Guillemet**, application of micro-analysis to the combustion of diamond, ii, 424.
- Nicolas, E.**, and **G. Nicolas**, influence of hexamethylenetetramine and formaldehyde on the haricot bean, i, 128.
- Nicolas, G.** See **E. Nicolas**.
- Niclaus, S.** See **O. Levaditi**.
- Niemann, G.** See **H. Fischer**.
- Nierenstein, M.**, the presence of the resorcinol nucleus in the tannin of quebracho wood, i, 385.
- Nierenstein, M.** See also **E. O. Hazleton**.
- Niessner, M.** See **L. Moser**.
- Nieten, F.** See **S. Skraup**.
- Nieuwland, J. A.** See **J. S. Reichert**, and **H. H. Wenzke**.
- Niggli, P.**, synthesis of minerals, ii, 680.
- Nikitin, N.** See **G. Tammann**.
- Nilsson, R.** See **H. von Euler**.
- Nishida, D.**, reaction between metallic copper and ferric ion in dilute sulphuric acid solution, ii, 426.
- Nishida, D.**, and **K. Hirabayashi**, reaction of potassium permanganate with cuprous oxide in dilute sulphuric acid, and the determination of metallic copper, and cuprous and cupric oxides in their mixtures, ii, 125.
- Nishida, K.** See **P. Karrer**, and **K. Yoshimura**.
- Nishikawa, H.**, **W. H. Perkin, jun.**, and **R. Robinson**, harmine and harmaline. VIII. Constitution of certain harmaline derivatives, i, 565.
- Nishimura, T.**, and **M. Murachi**, properties of magnesite, ii, 180.
- Nissen, B. H.** See **H. Adkins**.
- Nisson, P. S.** See **M. T. Bogert**.
- Nitzescu, I.**, and **J. Cosma**, effect of antipyretics on succinodihydrogenase and on the respiration of tissues. I., i, 1148.
- Nitzsche, H.** See **Wilhelm Schneider**.
- Nixon, I. G.** See **E. de B. Barnett**.
- Noble, E. C.** See **G. S. Eadie**.
- Nocea, T.**, datolite from Rigollo (Parma Province), ii, 867.
- Nodon, A.**, researches on cellular disintegration, i, 347.
radioactivity of living cells, i, 687.
- Noguchi, J.**, the hexose monophosphatase of takadiastase, i, 233.
- Noguchi, J.**, sulphatase. III. The enzymic fission of the ethereal sulphates in the urine of the horse, camel, and dog, i, 244.
sulphatase. IV. Enzymic fission of β -naphthyl hydrogen sulphate, i, 475.
hydrolysis of nucleic acid by takadiastase, i, 1141.
- Noguchi, J.** See also **C. Neuberg**.
- Nolan, J. J.**, constitution of gaseous ions, ii, 661.
- Nolan, L. S.** See **T. B. Osborne**.
- Noller, C. R.**, and **R. Adams**, use of aliphatic acid anhydrides in the preparation of ketones by the Friedel and Crafts reaction, i, 1207.
- Nolte, O.**, and **E. Sander**, action of salt solutions on the soil. II., i, 926.
- Nomura, H.**, and **J. Murai**, micro-determination of halogen by Baubigny and Chavanne's method, ii, 419.
- Norbury, A. L.**, solid solutions and inter-atomic relationships, ii, 229.
volumes occupied by the solute atoms in certain metallic solid solutions and their consequent hardening effect, ii, 522.
- Nordoff, R. von.** See **B. Davis**.
- Normand, G.** See **P. Jolibois**.
- Norris, J. F.**, catalytic effects of zinc chloride and aluminium chloride, i, 381.
- Norris, J. F.**, and **H. B. Taylor**, preparation of alkyl chlorides, i, 602.
- Norrish, R. G. W.**, and **E. K. Rideal**, conditions of reaction of hydrogen with sulphur. V. Photochemical union, ii, 848.
- Northrop, J. H.**, kinetics of trypsin digestion. I. Experimental evidence concerning the existence of an intermediate compound, i, 472.
test for diffusible ions. I. Ionic nature of trypsin, i, 473.
kinetics of trypsin digestion. II. Conditions under which the reaction is unimolecular, i, 805.
kinetics of trypsin digestion. III. The course of the reaction with constant substrate under conditions causing inactivation of the enzyme, i, 805.
kinetics of trypsin digestion. IV. The course of the reaction when both substrate and enzyme concentrations are decreasing, i, 805.
kinetics of trypsin digestion, i, 1267.
- Northrop, J. H.**, and **J. Freund**, agglutination of red blood cells, i, 781.

- Northrop, J. H.**, and **M. Kunitz**, combination of salts and proteins. I, ii, 831.
- Nottin, P.**, determination of maltose in the presence of other reducing sugars by means of Barfoed's solution, ii, 790.
- Noty, P. L. du**, surface tension of serum. X. Thickness of a unimolecular layer of serum, i, 1252.
dimensions of the molecules of certain colloidal substances, ii, 390.
dimensions and weight of the molecules of the serum proteins, ii, 593.
surface tension of colloidal solutions and dimensions of certain organic molecules, ii, 731.
- Nowy, B.** See **W. Steinkopf**.
- Noyes, A. A.**, inter-ionic attraction theory of ionised solutes. I, ii, 658.
inter-ionic attraction theory of ionised solutes. II. Testing of the theory with experimental data, ii, 659.
- Noyes, B., jun.**, variation in the resistance of carbon and graphite with temperature, ii, 647.
- Noyes, (Miss) H. M., K. Sugiura**, and **K. G. Falk**, enzyme action. XXVIII. Spontaneous increase in the activities of lipase and protease of tissue extracts, i, 1267.
- Noyes, (Miss) H. M.** See also **K. G. Falk**.
- Noyes, W. A.**, possible reconciliation of the octet and positive-negative theories of chemical combination, ii, 102.
polarity of valencies, ii, 720.
- Noyes, W. A.** See also **W. F. Goebel**, and **P. K. Porter**.
- Noyes, W. A., jun.**, luminous discharge in chlorine; electron affinity of halogen molecules, ii, 585.
- Noyes, W. A., jun.** See also **H. R. Moore**.

O.

- Oakley, H. B.** See **J. C. Philip**.
- Obarski, S.** See **A. Korczynski**.
- Oberhauser, F.** See **W. Manchot**.
- Oberhoffer, P.**, iron-silicon alloys, ii, 686.
- Oberlin, J.** See **P. Pfeiffer**.
- Obermiller, J.**, drying agents, and addition of known percentages of water vapour to air, ii, 454.
- Obreimov, I.**, and **L. Schubnikov**, preparation of single crystals of metals, ii, 721.
- O'Brien, H. R.** See **R. R. Sayers**.
- Ochi, S.**, the heat of formation of bleaching powder and the thermochemical explanation of its decomposition and formation, ii, 91.
an explanation of the explosive decomposition of bleaching powder and the mode of its decomposition at higher temperatures, ii, 108.
the reaction of carbon dioxide with bleaching powder, ii, 109.
determination of water in bleaching powder, ii, 122.
constitution of bleaching powder, ii, 256.
- Ochiai, E.**, alkaloids of *Sinomenium* and *Cocculus*. II. Constitution of sinomenine, i, 871.
- O'Connor, E. A.**, some binary systems composed of acetic acid and the homologues of aniline, i, 1058.
- Odams, R. C.** See **W. H. Mills**.
- Oddo, B.**, and **R. Binaghi**, oxidation of magnesium [magnesium alkyl] derivatives by means of hydrogen peroxide, i, 153.
- Oddo, B.**, and **G. B. Crippa**, discatole, i, 427.
- Oddo, B.**, and **D. Curti**, the oximic and iminic compounds of phenolphthalein, i, 966.
phthaleins. V. Constitution of the oximic and iminic compounds of phenolphthalein, i, 1199.
- Oddo, B.**, and **G. Sanna**, indole group. XI. Di-indylmethane, i, 1346.
- Odén, S.**, and **G. Köhler**, rhythmic bands, ii, 834.
- Odifreddi, A.** See **G. Charrier**.
- Odinot, (Mlle.) L.** See **V. Anger**.
- Oechslein, C.** See **Les Établissements Poulenc Frères**.
- Oehme, C.**, water-salt content of the body in relation to the acid-base economy. I. Colloidal chemical basis of purine diureis, i, 1012.
- Oelkers, K.**, initial stages of glow discharge in hydrogen and air, ii, 647.
- Oesterle, O. A.**, henna, i, 1152.
- Oesterlin, H.** See **W. Küster**.
- Ogburn, S. C., jun.** See **J. L. Howe**.
- Ohle, H.**, acetone-sugars and their derivatives. I. The constitution of glucosediacetone [diisopropylidene-glucose] and a new benzoylglucose-monoacetone, i, 497.
- Ohle, H.**, and **I. Koller**, acetone [isopropylidene] derivatives of sugars and their derivatives. II. Acetone compounds of lævulose, i, 1168.
- Ohler, E.** See **G. Tammann**.
- Ohse, W.** See **W. Steinkopf**.

- Ohtani, B.**, ternary alloys of aluminium, copper, and magnesium, ii, 114.
- Oinuma, S.** See *M. L. Anson*.
- Oksmann, M.** See *N. S. Kurnakov*.
- Okuda, Y.**, amino-acids containing sulphur. I. Determination of cystine, ii, 792.
amino-acids containing sulphur. II. Determination of cystine, ii, 793.
- Oldenberg, O.**, origin of iodine band spectra, ii, 579.
- O'Leary, J. V.** See *J. N. Pearce*.
- Oliver, J.**, and *L. Barnard*, influence of electrolytes on the stability of red blood-corpuscle suspensions, ii, 831.
- Oliver, J. H.** See *C. K. Ingold*.
- Oliveri-Mandalà, E.**, constitutional formula of strychnine. III., i, 1101.
- Olmer, L. J.**, solubility of silver oxide in ammonia and methylamine solutions, ii, 410.
fulminating silver, ii, 679.
- Olmer, L. J.**, and *Dervin*, silver nitride, ii, 410.
- Olmstead, P. S.**, and *K. T. Compton*, radiation potentials of atomic hydrogen, ii, 141.
- Olsson, F.**, new types of ter- and quadrivalent compounds of manganese, i, 1298.
quinquevalent chromium, i, 1299.
- Onnes, H. K.**, and *F. M. Penning*, isotherms of hydrogen between -104° and -244° , ii, 518.
- Onnes, H. K.** See also *G. Breit*, *L. C. Jackson*, *F. M. Penning*, *W. Tuyn*, and *H. R. Woltjer*.
- Ono, K.**, camphor oils. I. Reaction between camphor-red oil and sulphuric acid, i, 657.
- Onslow, H.**, determination of the tryptophan content of caseinogen, based on determinations of nitrogen values of the mercuric sulphate precipitate, ii, 358.
- Onslow, M. W.**, oxidising enzymes. VII. Oxygenase of higher plants, i, 921.
- Oparin, A.**, and *A. Bach*, significance of oxygen for the formation of enzymes in germinating plant seeds, i, 1276.
- Oparina, (Mlle.) M. P.** See *A. E. Tschitschibabin*.
- Oplinger, K. A.** See *R. H. George*.
- Oppenheim, E.** See *J. Piccard*.
- Orcel, J.**, new type of aluminous chlorite, ii, 621.
- Orékhov, A.**, and *M. Tiffeneau*, semipinacolinic transformation of arylhydrobenzoins; comparative migratory tendencies of naphthyl and phenyl radicals, i, 729.
- Orékhov, A.** See also *M. Tiffeneau*.
- Orient, J.**, influence of amines on fermentation. II., i, 465.
action of drugs containing hydroxymethylantraquinones on fermentation, i, 465.
- Orlov, N. A.**, action of aluminium alkyl oxides on mixtures of aldehydes, i, 645.
- Ormandy, W. R.**, and *E. C. Craven*, determination of naphthenes in petroleum spirits, ii, 351.
- Orndorff, W. R.**, and *E. Kline* [with *C. V. Shapiro*], 2:4-dihydroxybenzoyl-o-benzoic acid and some of its derivatives, i, 1317.
- Orndorff, W. R.**, and *R. S. Vose*, sulphonefluorescein and dihydroxybenzoylbenzene-o-sulphonic acid, and some of their derivatives, i, 1190.
- Ornstein, L. S.**, and *H. C. Burger*, laws of radiation and intensities of complex spectral lines, ii, 433.
- Orr, A. P.**, lævulose in the blood of the human foetus, i, 584.
- Orr, T. G.** See *R. L. Haden*.
- Orthner, L.** See *K. Freudenberg*.
- Ortner, H.** See *R. Kremann*.
- Orton, K. J. P.**, and *A. E. Bradfield*, purification of acetic acid, i, 607.
- Orton, K. J. P.**, and *G. Owen*, freezing-point curves for the system, 2-chloroacetanilide-4-chloroacetanilide, i, 503.
- Osada, S.**, alkaloids of *Datura alba*, Nees, i, 870.
mydriatic alkaloids from the *Datura* species. I., i, 1226.
- Osaka, Y.**, *G. Shima*, and *R. Yoshida*, equilibrium of the system, ferric chloride-aniline hydrochloride-hydrogen chloride-water at 25° , i, 721.
- Osato, S.**, the composition of herring ova. V. The monoamino-acids of the skins of the ova, i, 116.
- Osato, S.** See also *H. Studel*.
- Osborne, N. S.**, calorimetry of saturated fluids, ii, 465.
- Osborne, T. B.**, *C. S. Leavenworth*, and *L. S. Nolan*, Dakin's method applied to edestin, i, 1361.
- Osborne, T. B.**, and *L. B. Mendel*, effect of diet on the content of vitamin-B in the liver, i, 454.
- Osborne, T. B.**, and *L. B. Mendel* [with *H. C. Cannon*], nutrition and growth on diets highly deficient or entirely lacking in preformed carbohydrates, i, 685.
- Osborne, T. B.** See also *C. S. Leavenworth*.
- Oschwald, U. A.**, and *A. G. Farrow*, new photo-electric and ionisation effect, ii 585.

- Osgood, T. H.**, variation in photo-electric activity with wave-length for metals in air, ii, 444.
- Ossart, E.** See *A. Berthelot*.
- Ostrowski, (Mlle.) J.** See *E. Wollman*.
- Ostwald, Wolfgang**, theory of carbonic acid assimilation, i, 250.
variable and invariable properties of dispersion, ii, 96.
viscosimetry of colloidal solutions, ii, 660.
- Ostwald, Wolfgang**, and *F. Piekenbrock*, colloid chemical characterisation of technical clays and kaolins. I., ii, 555.
- Ott, C. N.** See *J. N. Pearce*.
- Ott, E.**, exact gas-analytical methods for the analysis of gaseous fuels, ii, 875.
- Ott, E.**, and *O. Lüdemann*, pepper-substances. III. The chavicine of black pepper. II., i, 418.
- Ott, H.**, [crystal] lattice of aluminium nitride, ii, 298.
- Ott, S.**, pyrogenic dissociation of sodium oxalate, i, 706.
- Ottens, B.** See *K. von Auwers*.
- Ottensmeyer, F.** See *H. Lüers*.
- Otto, C. E.**, and *H. S. Fry*, decomposition of potassium chlorate and its catalysis by potassium chloride, ii, 335.
- Otto, J.** See *L. Holborn*.
- Otto, R.** See *J. Tillmans*.
- Onchakov, M.** See *N. D. Zelinski*.
- Owe, A. W.** See *S. Schmidt-Nielsen*.
- Owen, E. A.**, and *G. D. Preston*, X-ray analysis of zinc-copper alloys, ii, 110.
X-ray analysis of solid solutions, ii, 111.
- Owen, G.** See *K. J. P. Orton*.
- Owen, S. P.**, simple derivation of van der Waals' vapour pressure equation with a note on molecular diameters, ii, 231.
- Ôyama, G.** See *Y. Tanaka*.
- P.**
- Pacsu, E.**, acetone [isopropylidene] compounds of the mercaptals of certain monosaccharides. I. Acetone compounds of *d*-glucosidibenzylmercaptal, i, 712.
- Padár, F.**, reaction of the urine of the horse, i, 1257.
- Pados, M.**, and *N. Vita*, yield of photo-chemical reactions with complex light, ii, 322.
- Page, H. J.**, the perchlorate method for the determination of potassium in soils, fertilisers, etc., ii, 202.
- Page, I. H.**, asteriasterol, a new sterol from the starfish and the sterols of certain other marine echinoderms, i, 120.
- Page, J. H.**, ethylisoamylbarbituric acid, an anæsthetic without influence on blood-sugar regulation, i, 911.
- Page, L.**, electron theory of the Hall effect, ii, 716.
- Pagel, C.**, determination of urea in blood, ii, 575.
- Paillard, H.** See *H. Goudet*.
- Paine, H. H.**, and *G. T. R. Evans*, method of measuring the rate of coagulation of colloidal solutions over wide ranges, ii, 531.
- Palfray, L.**, reduction products of some acids derived from camphor, i, 289.
- Palfray, L.** See also *A. Haller*.
- Palit, C. C.**, detection of cobalt and nickel separately or in the presence of each other, ii, 426.
- Palit, C. C.**, and *N. R. Dhar*, catalysis. XXIV. Action of nitric acid on mercury at different temperatures and in the presence of different catalysts, ii, 486.
- Palkin, S.**, and *H. Wales*, the identification of phenols by means of the spectroscope, ii, 630.
- Palladin, A.**, and *L. Griliches*, biochemistry of experimental tetany; urinary and muscle creatine in guanidine and parathyroid tetany with and without calcium treatment, i, 898.
- Palladin, A.**, and *A. Kudrjatzewa*, influence of phosphorus poisoning on muscle creatine and on creatine-creatinine excretion, i, 910.
- Palladin, A.**, and *D. Zuverkalov*, aminogenesis in the grey and white substances of the brain during hunger, i, 1256.
- Palmer, C. S.**, aliphatic arseno-compounds. I. Arsenoacetic acid and tetra-arsenoacetic acid, i, 152.
- Palmer, L. S.**, biochemistry of carotinoid pigments in animals, i, 1261.
- Palmer, L. S.**, and *H. H. Knight*, carotin; the principal cause of the red and yellow colours in *Perillus bioculatus* (Fab.) and its biological origin from the lymph of *Leptinotarsa decemlineata* (Say), i, 792.
anthocyanin and flavone-like pigments as cause of red colorations in the hemipterous families, *Aphididae*, *Coreidae*, *Lygaeidae*, *Miridae*, and *Reduviidae*, i, 793.
- Palmer, P. E.**, and *E. R. Weaver*, thermal-conductivity method for the analysis of gases, ii, 495.

- Palmer, W. G.**, use of the coherer to investigate adsorption films, ii, 865.
- Palmer, W. G.**, and **F. H. Constable**, catalytic action of copper. IV. Periodic variation of the activity with temperature of reduction, ii, 843.
- Pamfil, G. P.**, detection of bromine and iodine ions in presence of other ions giving precipitates with silver nitrate, ii, 497.
metallic magnesium as a qualitative and quantitative reagent in inorganic analysis, ii, 500.
apparatus for measuring the volume of gas evolved from a reaction, ii, 694.
- Pamfil, G. P.**, and **M. Wonnesech**, detection of bromide and iodide ions in the presence of other ions giving precipitates with silver nitrate, ii, 697.
- Pamfil, G. P.** See also **I. D. Götz**.
- Pamfilov, A.**, and **W. Jofinov**, microchemical determination of perchlorate, ii, 697.
- Paneth, F.**, and **A. Radu**, adsorption of dyes by diamond, charcoal, and artificial silk, ii, 606.
- Paneth, F.**, and **W. Thimann**, adsorption of dyes by crystals, ii, 612.
- Papasogli, E.**, derivatives of diphenylamine, i, 1301.
- Papendieck, A.**, hæmatoporphyrin of human feces, i, 460.
occurrence of porphyrin in blood-serum, i, 894.
porphyrins from blood-pigment, i, 894.
- Papendieck, A.** See also **O. Schumm**.
- Parfitt, E. H.**, and **G. Spitzer**, quantitative action of enzymes of seven specific organisms on the proteins of milk and on gelatin, i, 1015.
- Parisi, E.**, products of decomposition of benzaldoxime peroxide, i, 1075.
- Parisi, E.** See also **R. Ciusa**.
- Park, J. R.**, and **J. R. Partington**, the reaction between copper and nitrogen peroxide, ii, 183.
- Parker, (Miss) E. W.** See **H. C. Parker**.
- Parker, F. W.**, carbon dioxide production of plant roots as a factor in the feeding power of plants, i, 811.
- Parker, F. W.** See also **J. W. Tidmore**.
- Parker, H. C.**, and **(Miss) E. W. Parker**, calibration of cells for conductance measurements. III. Absolute measurements of the specific conductance of certain potassium chloride solutions, ii, 304.
- Parker, R. M.**, **M. G. Rau**, **W. A. Robertson**, and **J. L. Simonsen**, oils and fats from the seeds of Indian forest plants. VI. Oil from the seeds of *Aleurites montana*, Wilson, i, 608.
- Parkes, A. S.** See **N. H. Long**.
- Parkes, G. D.** See **F. D. Chattaway**.
- Parks, G. S.**, and **J. R. Schwenck**, physico-chemical properties of mixtures of ethyl and *n*-propyl alcohols, i, 930.
- Parravano, N.**, and **C. R. del Turco**, gases extractable from heated steels, and reducibility of the oxides of carbon, ii, 173.
- Parri, W.**, group of colour reactions of veronal, ii, 634.
- Parsons, T. R.**, and **W. Parsons**, the transport of carbon dioxide in the blood of marine invertebrates, i, 111.
- Parsons, T. R.** See also **V. K. LaMer**.
- Parsons, W.** See **T. R. Parsons**.
- Partington, J. R.**, the early history of hydrofluoric acid, ii, 167.
action of nitrogen peroxide on cuprous oxide, ii, 340.
overvoltage and physical properties, ii, 599.
- Partington, J. R.**, and **A. B. Howe**, the ratio of the specific heats of nitrogen and of oxygen, ii, 145.
- Partington, J. R.**, and **A. J. Prince**, explosion of ammonia with electrolytic gas and oxygen, ii, 850.
- Partington, J. R.**, and **F. A. Williams**, reaction between calcium oxide and nitrogen peroxide, ii, 411.
- Partington, J. R.** See also **J. J. Doolan**, **J. Grant**, and **J. R. Park**.
- Parvatiker, R. R.**, and **B. C. McEwen**, mutual solubility. III. Mutual solubility of glycerol and amino- and hydroxy-compounds, ii, 659.
- Pascal, P.**, hexametaphosphates, ii, 39.
the metaphosphates, ii, 171, 856.
"insoluble" alkali metaphosphates, ii, 171, 476.
constitution and evolution of precipitates of alumina, ii, 186.
transitions of the polymetaphosphates, ii, 605.
- Pascual Vila, J.**, some derivatives of deoxycholic acid, i, 47.
preparation of an isodeoxycholic acid, i, 47.
- Pascual Vila, J.** See also **A. García Banús**.
- Paschkis, K.** See **E. Wöhlisch**.
- Passerini, M.**, action of phenylcarbylamine on β -naphthol, i, 57.

- Passerini, M.**, isonitriles. VII. Interaction of phenylcarbylamine and β -naphthol, i, 751.
- isonitriles.** VIII. Reaction with aldehydes or ketones in presence of organic acids, i, 1180.
- isonitriles.** IX. Reaction of phenylcarbylamine with pernitrosocamphor, i, 1212.
- the systems, aldehydes-organic acids and ketones-organic acids, i, 1319.
- isonitriles.** XI. Reaction of phenylcarbylamine with anil derivatives of aromatic *o*-hydroxyaldehydes, i, 1319.
- isonitriles.** X. Reaction of aromatic carbylamines with naphthols and with phenols, i, 1320.
- Pastanogov, W.**, kinetics of catalytic decomposition of bromocamphor-carboxylic acid, ii, 842.
- Pastureau, and H. Bernard**, the halo-hydrins of mesityl oxide, i, 5.
- trimethylethylglycerol [$\beta\delta$ -dimethylhexane- $\beta\gamma\delta$ -triol], i, 1029.
- Patel, C. K.**, oil from *Mimusops hexandra*: ryan oil, i, 1032.
- Paton, F. J., D. R. Nanji, and A. R. Ling**, hydrolysis of the endosperm of *Phytalephas macrocarpa* by its own enzymes, i, 801.
- Paton, R. F.** See **R. A. Sawyer**.
- Patrick, W. A.** See **F. V. Grimm**.
- Patry, R.** See **E. Briner**.
- Patterson, T. S.**, derivation of the word "mercaptan," ii, 324.
- Patterson, T. S., and C. Buchanan**, optical superposition. V. *d*-sec.-Octyl *i*-tartrate, i, 1041.
- Patterson, T. S., and J. Robertson**, decomposition of ethylene bromide by potassium and sodium iodide solutions, i, 1027.
- Patzschke, W.** See **E. Sieburg**.
- Paul, F.** See **R. Weiland**.
- Pauli, W.**, oxide content of colloidal gold, ii, 768.
- Pauli, W., and F. Rogan**, general colloid chemistry. XII. Constitution and stability of iron oxide sols. III., ii, 740.
- Pauli, W., and A. Semler**, constitution of arsenic trisulphide sols, ii, 333.
- Pauli, W.** See also **M. Adolf**, and **A. Erlach**.
- Pauling, L.**, crystal structure of magnesium stannide, ii, 110.
- Pauling, L., and R. G. Dickinson**, crystal structure of uranyl nitrate hexahydrate, ii, 619.
- Pauly, H., Horst Schmidt, and E. Böhme**, transformation of cinnamaldehyde into cinnamyl alcohol, and the constitution of cubebin, i, 1189.
- Pannz, L.** See **L. Karczag**.
- Pauthenier, M.**, isotropic increase of the index of refraction of liquids in an electric field, ii, 582.
- Pauthenier, M.** See also **G. Bruhat**.
- Pavelka, F.** See **F. Feigl**.
- Pavesi, P.** See **G. Charrier**.
- Pavlov, G.** See **N. D. Zelinski**.
- Pavlov, P. N.**, formation of colloids by the electrolysis of dilute solutions, ii, 236.
- adsorption. I. Adsorption and heterogeneous chemical equilibrium, ii, 594.
- adsorption. II. Adsorption and heterogeneous distribution, ii, 732.
- adsorption. III. Surface tension of liquid mixtures and adsorption, ii, 732.
- adsorption. IV. Interfacial tension between a liquid mixture and another non-gaseous phase, ii, 732.
- adsorption. V. Capillary adsorption, ii, 733.
- adsorption. VI. Methods for distinguishing the different types of adsorption, ii, 833.
- adsorption. VII. Nature of the adsorption of acetic acid by charcoal, ii, 833.
- Pavlov, W.** See **S. Borovic**.
- Paweck, H., and E. Walther**, application of the rigid mercury cathode in electro-analysis. I., ii, 562.
- Pawelka, F. G.**, organic silver complexes, i, 838.
- Payer, T.** See **A. Gutbier**.
- Payne, H. R.** See **H. A. Schwartz**.
- Payne, J. M.** See **J. H. Ross**.
- Payne, W. B.** See **M. C. Hart**.
- Peach, E. A., and J. C. Drummond**, culture of the marine diatom *Nitzschia closterium* (F.) *minutissima* in artificial sea-water, i, 908.
- Peacock, D. H.**, 4-nitro-2-sulphophenyl-dehydrothio - *p* - toluidinesulphonic acid, i, 1119.
- velocity of benzylation of certain amines, i, 1297.
- Pearce, J. N., and W. G. Eversole**, equilibrium between iodine and barium iodide, ii, 328.
- Pearce, J. N., and A. E. Fortsch**, free energy of dilution and the activity of the ions of hydrogen iodide in aqueous solution, ii, 89.
- Pearce, J. N., and J. V. O'Leary**, influence of gum arabic on the hydrolysis of methyl acetate, ii, 245.

- Pearce, J. N., and C. N. Ott**, mechanism of the catalytic decomposition of ethyl acetate by nickel at various elevated temperatures, ii, 843.
- Pearsall, W. H., and J. Ewing**, the isoelectric points of some plant proteins, i, 813.
- Pearson, A. R.**, ulmic constituents of coal, ii, 620.
- Pease, R. N., and C. C. Yung**, catalytic dehydration of ethyl alcohol and ether by alumina, i, 363.
- Peck, W. C.** See *E. de B. Barnett*.
- Pedersen, K.** See *J. N. Brønsted*.
- Peiser, E.** See *H. Steudel*.
- Peklo, J.**, mechanism of photosynthesis, i, 1018.
- Pélabon, H.**, action of potassium hydroxide on mercuric iodide, ii, 614.
direct formation of mercuric oxychlorides, oxybromides, and oxyiodides, ii, 762.
- Pelling, A. J.** See *J. B. Robertson*.
- Pellizzari, G.**, action of cyanogen halides on phenylhydrazine. VII. Derivatives of guanazine, i, 94.
action of cyanogen halides on phenylhydrazine. VIII. Exo-alkyl derivatives of melamine, i, 771.
action of cyanogen halides on phenylhydrazine. IX. *o*-Phenylenethioammeline, i, 992.
- Pénau, H.**, preparation of insulin, i, 1150.
- Pénau, H., and H. Simonnet**, physiological testing of insulin preparations, i, 897.
- Pénau, H.** See also *R. Fabre*.
- Peneau, (Mlle.) G.** See *A. Boutaric*.
- Penfold, A. R.**, essential oils from *Leptospermum Liversidgei*, i, 757.
essential oil of *Backhousia myrtifolia* [grey or "scrub" myrtle], i, 758.
essential oil of *Backhousia angustifolia*. I., i, 1328.
essential oil of *Darwinia grandiflora* and the presence of a new acetic ester, i, 1328.
essential oils of *Callistemon lanceolatus* and *C. viminalis*, i, 1329.
- Penfold, A. R., and F. R. Morrison**, a new stearopten occurring in some essential oils of the Myrtaceæ, i, 757.
electrolytic reduction of piperitone, i, 1321.
- Penfold, A. R., and R. Grant**, germicidal values of commercial eucalyptus oils and their pure constituents, with observations on the value of concentrated disinfectants, i, 1329.
- Penfold, A. R., and R. Grant**, germicidal values of Australian essential oils (exclusive of eucalypts) and their pure constituents, together with those of some essential oil isolates and synthetics. I., i, 1329.
- Penning, F. M.**, isochores of air and of certain other gases, ii, 518.
- Penning, F. M., and H. K. Onnes**, isotherms of helium between -205° and -258° , ii, 518.
- Penning, F. M.** See also *H. K. Onnes*.
- Pennycuik, S. W.**, mutarotation lag in sucrose inversion, i, 1287.
- Perciabosco, F.**, detection and determination of thiocyanates in presence of ferrocyanides, ii, 354.
- Pereira, H.**, preparation of dihydroxyperylene, i, 38.
aminoperylenequinones, i, 1081.
- Perelmutter, S.** See *N. S. Kurnakov*.
- Pergola, C. della.** See *G. Canneri*.
- Perin, J.** See *E. Darmois*.
- Perkin, A. G.** See *F. L. Goodall*, and *J. W. E. Haller*.
- Perkin, W. H., jun., and S. G. P. Plant**, 1:2:3:4:5:6:7:8-octahydrocarbazole and its derivatives, i, 1104.
- Perkin, W. H., jun.** See also *A. W. Bernton, K. G. Blaikie, British Dyestuffs Corporation, J. S. Buck, G. R. Clemo, R. D. Haworth, H. R. Ing, and H. Nishikawa*.
- Perkins, G. A., and A. O. Cruz**, oils in the chaulmoogra group, i, 486.
- Perks, T. E.**, determination of phosphine in acetylene, ii, 202.
- Perman, E. P., and D. R. Dawkins**, ammonium nitrate. VIII. Analysis of crystalline deposits from solution in fused ammonium nitrate, ii, 550.
- Perman, E. P., and W. R. Harrison**, ammonium nitrate. VII. The reciprocal salt pair, ammonium nitrate and sodium sulphate, ii, 255.
ammonium nitrate. IX. The reciprocal salt pair, ammonium nitrate and lithium chloride, ii, 756.
- Perquin, J. N. J.** See *H. I. Waterman*.
- Perrakis, N.**, specific heat and heat of mixing in the neighbourhood of the state of critical miscibility, ii, 91.
volumes in the neighbourhood of the critical state of miscibility, ii, 453.
- Perrakis, N., and A. Massol**, method of determining micromiscibilities, ii, 147.
- Perret, A.** See *E. Baur*.
- Perrier, C.**, "hydrozincite," ii, 773.
- Perrin, F.**, effect of viscosity on fluorescence, ii, 514.
law of decrease of fluorescing power as a function of concentration, ii, 713.

- Perrin, F.** See also *A. Lumière*.
Perron, (Mlle.). See *Travers*.
Perry, J. H., Joule-Thomson effect for helium, ii, 821.
Pervier, N. C., and R. A. Gortner, determination of pentoses and pentosans. II. Determination of furfur-aldehyde, ii, 71.
Pesketh, G. L., allelocatalysis and the growth of yeast, i, 1383.
Pestelli, V. See *G. Canneri*.
Peters, J. P., H. A. Bulger, and A. J. Eisenman, carbon dioxide absorption curve of human blood. IV. Relation of the hæmoglobin content of blood to the form of the carbon dioxide absorption curve. V. The construction of the CO₂ absorption curve from one observed point. VI. The relationship of the CO₂ of blood to that of plasma, i, 439.
Peters, K., a confirmation of Faraday's law for lithium hydride, ii, 174.
Peters, R. A., action of nitrous acid on the antineuritic substance in yeast, i, 1388.
Petersen, H. See *E. Blanck*.
Peterson, W. H., E. B. Fred, and B. P. Domogalla, proteolytic action of *Bacillus granulobacter pectinovorum* and its effect on the hydrogen-ion concentration, i, 1270.
Peterson, W. H., E. B. Fred, and E. G. Schmidt, fermentation of pentoses by *Bacillus granulobacter pectinovorum*, i, 1270.
Peterson, W. H. See also *E. G. Schmidt*.
Petit, R. See *P. Lemay*.
Petow, H. See *M. Bálint, and P. Rona*.
Petren, K., low nitrogen metabolism with low carbohydrate diet in diabetes, i, 1268.
Petrenko, T. See *P. P. Fedotéev*.
Petrie, J. M., plant pigments. I. Yellow colouring matter of the acacias, i, 660.
 yellow pigments of Australian acacias, i, 1389.
Petrikaln, A., chemi-luminescence and energy changes in the oxidation of phosphorus, ii, 239.
 chemi-luminescence of the iodide of Millon's base, ii, 713.
Petschacher, L. See *W. Berger*.
Pettersson, D., long-range particles from radium-active deposit, ii, 380.
Pettersson, H., structure of the atomic nucleus and the mechanism of its disintegration, ii, 380.
Pettersson, H. See also *E. Kara-Michailova, and G. Kirsch*.
Petzold, A. See *J. von Braun*.
Peyfuss, J. See *C. Mayr*.
Peytral, (Mlle.) E., pyrogenic decomposition of propyl alcohol, i, 1158.
 pyrogenic decomposition of ethylether, i, 1158.
 pyrogenic decomposition, at high temperatures, of acetic anhydride, i, 1161.
Pezzali, G., composition of blood in epilepsy, i, 1137.
Pfaff, J. K., and R. Brunck, the processes of dehydrogenation in the presence of catalysts, i, 129.
Pfaltz, M. H., oxidation of uric acid with ferrous salts. I., i, 217.
Pfaltz, M. H., and O. Baudisch, new methods of splitting pyrimidines. II. Decomposition of pyrimidines by means of ferrous salts, i, 210.
Pfaltz, M. H. See *P. A. Levene*.
Pfankuch, E. See *K. W. Rosenmund*.
Pfannmüller, W. See *E. Berl*.
Pfau, A. S., constitution of sparassol, i, 512.
 constitution of lichenol, i, 1329.
Pfeiffer, P., degradation product of brazilin obtained by Schall and Dralle, i, 660.
 reaction between antimony pentachloride and ethyl oxalate, i, 832.
 ammonia and amine compounds of stannic dialkyl halides, i, 837.
 position of beryllium and magnesium in the periodic system of the elements, ii, 258.
 localisation and specific action of subsidiary valencies, ii, 719.
Pfeiffer, P., and (Miss) O. Angern, salting-out of amino-acids, i, 378.
 determination of molecular weights of amino-acids in aqueous salt solutions, ii, 591.
Pfeiffer, P., M. Klossmann, and O. Angern, amino-acids and polypeptides in combination with neutral salts. IV., i, 378.
Pfeiffer, P., and J. Oberlin, the brazilin and hæmatoxylin question. III. The degradation product of brazilin obtained by Schall and Dralle, i, 413.
Pfeiffer, W. See *E. Briner*.
Pfeilsticker, K. See *W. Wislicenus*.
Pfyl, B., and W. Samter, alkalinity of the ash of foodstuffs. II. Simultaneous titration of a number of components of the ash, ii, 276.
Phelps, E. P. See *A. W. Rowe*.
Philip, J. C., and R. S. Colborne, solubility of anilinesulphonic acids, i, 504.

- Philip, J. C.**, and **J. Jarman**, adsorptive capacity of wood charcoal for dissolved substances, in relation to the temperature of carbonisation, ii, 393.
- Philip, J. C.**, and **H. B. Oakley**, conductivity and ionisation of solutions of potassium iodide in nitromethane, ii, 656.
- Phillipps, J. E.** See **H. B. Speakman**.
- Phillips, A. W.** See **A. B. Lamb**.
- Phillips, H.** See **R. H. A. Plimmer**.
- Phillips, M.**, sulphonation of *p*-cymene, i, 630.
- Phragmén, G.** See **A. Westgren**.
- Piaux, L.**, velocity of spontaneous oxidation of uric acid in alkaline solution, i, 430.
action of catalysts on the oxidation of uric acid; iron and manganese (hydroxides), i, 431.
- Piaux, L.** See also **L. J. Simon**.
- Picard, M.** See **J. Marcusson**.
- Picard, P.** See **R. Dubrisay**.
- Piccard, J.**, the influence of oxalic acid on the formation of aniline black, i, 197.
the constitutional formula of barium peroxide, ii, 110.
- Piccard, J.**, and **F. Abouchy**, diphenyl phenylenediamines and the colour of their oxidation products, i, 316.
- Piccard, J.**, and **C. Buffat**, determination of fluorine in organic compounds, ii, 122.
- Piccard, J.**, and **J. H. Dardel**, an application of the colorimetric law of dilution, i, 85.
- Piccard, J.**, and **F. de Montmollin**, absorption colours of the second order, i, 208.
the formation of aniline black, a bimolecular reaction, ii, 100.
qualitative reaction of halogens in organic compounds, ii, 121.
- Piccard, J.**, and **E. Oppenheim**, the reduction of chrysin, i, 198.
- Piccard, J.**, and **E. Thomas**, coloured ions and the colours of salts, ii, 81.
catalytic metals, ii, 100.
electroisomerism: the constitutional formula of "hyposulphurous" [thiosulphuric] acid and the true thiosulphuric acid, ii, 103.
the reduction of azoimide, i, 104.
the solubility of cadmium sulphide, ii, 110.
- Piccardi, G.**, thermal method for the study of gaseous systems, ii, 537, 600.
- Pichard, G.** See **G. Rivière**.
- Pichetto, A.** See **G. Ponzio**.
- Pichon, M.** See **R. Clogne**.
- Pickering, (Miss) E.** See **H. Adkins**.
- Pickering, E. C.** See **F. J. Wilson**.
- Pickering, J. W.**, and **J. A. Hewitt**, action of peptone and of nucleic acids on the coagulability of the blood, i, 442.
- Pickering, J. W.**, and **F. E. Taylor**, blood coagulation, anti-coagulants, and hæmolytic, i, 1367.
- Pickering, S. F.**, critical constants of various gases, ii, 231.
- Picon, M.**, action of liquid ammonia and sodamide on halogen derivatives of ethane; preparation of pure monoethylamine, i, 1172.
thermal analysis of the system, sodium thiosulphate-water, ii, 255.
hydrates of sodium thiosulphate, ii, 255.
action of heat in a vacuum on sodium thiosulphate and sulphite, ii, 479.
- Picon, M.** See also **P. Lebeau**.
- Pictet, A.**, and **N. Andrianoff**, action of heat on sucrose, i, 1045.
- Pictet, A.**, and **M. M. Egan**, lactosan, i, 499.
- Pictet, A.**, and **R. Salzmänn**, trihexosan, i, 1288.
- Pictet, A.**, and **P. Stricker**, constitution and synthesis of isosaccharosan, i, 1046.
a hexahexosan obtained from starch, i, 1288.
- Pickenbrock, F.** See **Wolfgang Ostwald**.
- Pieper, H.** See **W. Biltz**.
- Pieroni, A.**, azoxyamides and pyrroles, i, 774.
- Pieroni, A.**, and **G. Giannini**, azoxyesters, i, 772.
- Piersol, R. J.**, symmetry of incident and emergent photo-electronic velocities, ii, 286.
- Pietschmann, A.**, microchemical detection of mustard oils, ii, 793.
- Piettre, M.**, separation of proteins of white of egg by the acetone method, i, 228.
proteins of milk-serum; their separation by the acetone method, i, 348.
- Piettre, M.**, and **C. Roéland**, trimyristin, a glyceride present in milk, i, 933.
- Piggott, H. A.** See **C. K. Ingold**.
- Pigorini, L.**, egg of *Bombyx mori*—proteins, reactions, i, 1134.
- Pilgrain, P.** See **H. Imbert**.
- Piña de Rubies, S.**, new rays in the arc spectrum of scandium in air between 3200 and 2200 Å, ii, 214.
- Pineckney, R. M.**, effect of nitrate applications on the hydrocyanic acid content of *Sorghum*, i, 1021.

- Pincus, J. B., and B. Kramer**, the concentration of various anions and kations in cerebrospinal fluid and serum, i, 117.
- Pincussen, L.**, the influence of colloids on ferments. I., i, 105.
ferments and light. V. Diastase. IV., i, 469.
influence of sunlight on protein metabolism, i, 1127.
- Pincussen, L., and N. Kato**, ferments and light. III. Urease. II., i, 107.
- Pincussen, L., and N. Klissunis**, determination of blood-sugar, i, 1124.
- Pincussen, L., and F. Di Renzo**, ferments and light. IV. Diastase. III., i, 468.
- Pinkus, A.**, ionisation of gases during chemical reactions, ii, 463.
- Pinnow, J.**, the interaction of ferric salts and sulphurous acid, and its catalysis, ii, 80.
- Pionchon, J., and (Mlle.) F. Démora**, formation of photo-electrically active films of cuprous oxide, ii, 602.
- Piper, H. A., R. S. Allen, and J. R. Murlin**, aqueous extracts of pancreas. II. Physical and chemical behaviour of insulin, i, 447.
- Pirani, M.** See *E. Lax*.
- Pirschle, K.** See *G. Klein*.
- Pisbor, K.** See *H. Fischer*.
- Pitini, A.**, action of bromine on certain plants, i, 1392.
- Pittarelli, E.**, detection and differentiation of thiosulphuric and sulphurous acids and hydrogen sulphide in organic liquids, ii, 777.
- Pittenger, P. S.**, standardisation of gelsemium, ii, 635.
- Pittenger, W. H.** See *L. H. Cretcher*.
- Piutti, A.**, optically active asparagine in seedling lupinus, i, 1152.
action of light on solutions of organic compounds in chloropicrin, i, 1162.
mixtures absorbing carbon monoxide, ii, 59.
content of hafnium in Vesuvian zircon, i, 868.
- Piutti, A., and P. Badolato**, action of light on solutions of certain organic substances in chloropicrin, i, 1028.
- Piutti, A., and E. Boggio-Lera**, diffusibility of helium through crystalline septa, ii, 42.
diffusibility of helium through Thuringian glass, ii, 105.
rare gases of volcanic exhalations, ii, 854.
- Piutti, A., and A. Curzio**, action of carbonyl chloride on ricinolein, ii, 74.
- Piutti, A., and D. Migliacci**, combining weight of the lead of a Vesuvian cotunnite, ii, 181, 859.
- Plant, S. G. P.** See *W. H. Perkin, jun.*
- Plantefol, L.** See *A. Mayer*.
- Platard, M.** See *P. Girard*.
- Plimmer, R. H. A.**, analysis of proteins. II. Action of nitrous acid on the hexone bases, ii, 358.
- Plimmer, R. H. A., and J. Lowndes**, changes in the lime content of the hen's egg during development, i, 1371.
- Plimmer, R. H. A., and H. Phillips**, analysis of proteins. III. Determination of histidine and tyrosine by bromination, ii, 576.
- Plimmer, R. H. A., and T. Shimamura**, analysis of proteins. IV. Some analyses of gelatin, ii, 576.
- Plotnikov, J.**, photochemical studies. XVII. Photochemical oxidation of hydriodic acid, ii, 668.
- Plotz, H., and M. Schoen**, changes of reaction of sera, i, 895.
- Plowman, A., and M. A. Whiteley**, the oxime of mesoxamide (oximinomalonamide) and some allied compounds. V. Structural- and stereo-isomerism in the methyl ethers of the *p*-tolyl derivatives, i, 623.
- Plücker, W.**, new Soxhlet apparatus, ii, 417.
- Pogantsch, K.** See *R. Kremann*.
- Poggi, R.** See *D. Bigiavi*.
- Pohl, J.** See *J. von Braun*.
- Pohl, R.** See *B. Gudden*.
- Pohland, E.** See *A. Stock*.
- Pohland, R.** See *E. Krause*.
- Pohle, F.** See *G. F. Hüttig*.
- Poindexter, R. W.** See *O. Diels*.
- Poirot, G.** See *L. Grimbart*.
- Poizat, J.**, the action of chromisulphuric and ferrisulphuric acids on the decomposition of hydrogen peroxide, ii, 192.
- Pokrowskaja, E.** See *N. D. Zelinski*.
- Póányi, M.** See *H. Mark*.
- Polenske, R.** See *F. Eisenlohr*.
- Policard, A.**, a method of micro-incineration applicable to histochemical researches, i, 119.
- Pollak, E.** See *T. Brugsch*.
- Pollak, I.**, micro-determination of nickel, ii, 787.
- Pollak, I.** See also *R. Strebing*.
- Pollak, J., and O. Lustig**, the constitution of the *m*-xylenedisulphonyl chlorides, i, 30.

- Pollitzer, F.**, determination of the density of gases, ii, 519.
Polonovski, Max, and **Michel Polonovski**, tautomerism of eserine, i, 980.
 degradation of hydrogenated derivatives of eserine, i, 1093.
 benzoyl and nitroso-derivatives of eserine, i, 1094.
 hydrogen derivatives of eserine, i, 1094.
Polonovski, Michel, sulphochromic oxidation and β -oxidation, i, 364.
 apparatus for the semimicro-determination of carbon, ii, 424.
Polonovski, Michel, and **C. Auguste**, distribution of carbamide in blood and in cerebrospinal fluid, i, 1126.
Polonovski, Michel. See also **Max Polonovski**.
Poma, G., influence of neutral salts on the potential of metal electrodes, ii, 148.
Pomeranzev, A. See **N. Isgarishev**.
Pomeroy, R. See **R. H. Dalton**.
Pommer, F. See **F. Honcamp**.
Pompeani, effect of salts of the rare earths on the excretion of uric acid, i, 1135.
Ponce, H. P., "lecitiburin," a lecithin from the eggs of the shark, i, 1371.
Ponder, E., hæmolytic action of the soaps, i, 1367.
Pongrácz, E. See **A. Löwenbein**.
Pongratz, A. See **A. Zinke**.
Pontalti, S. See **L. Ruzicka**.
Ponte, G., magmatic gases of Etna lava collected by the method of inhalation, ii, 493.
Pontremoli, A., electrical conductivity of flames containing salts of the alkali metals, ii, 388.
Ponzio, G., dioximes. XV., i, 56.
Ponzio, G., and **V. Bernardi**, dioximes. XVI., i, 293.
Ponzio, G., and **A. Pichetto**, electrolytic preparation of hydroxylamine, ii, 673.
Ponzio, G., and **G. Ruggeri**, dioximes. XIV., i, 56.
Ponzio, G., and **B. Zanardi-Lamberti**, dioximes. XVII., i, 324.
Poole, J. H. J., and **J. Joly**, radio-activity of basalts and other rocks, ii, 812.
Pope, (Sir) W. J., and **F. G. Mann**, preparation of $\alpha\beta$ -triaminopropane and formation of complex metallic derivatives, i, 1049.
Pope, (Sir) W. J. See also **F. G. Mann**.
Popescu, E., contributions towards the study of the lipoids of the human brain, i, 346.
Popov, M. See **W. Swientoslawski**.
Popper, L. See **A. Löwenbein**.
Poritsky, A., optical properties of fluorescent rhodamine-B, ii, 371.
Porlezza, C., arc spectrum of silicon in relation to spectrographic analysis, ii, 345.
 regularities in the spectrum of silicon tetrafluoride, ii, 436.
 chemico-physical calculations relating to the degree of dissociation of the dissolved substances in mineral waters. I. and II., ii, 469, 603.
Porlezza, C., and **A. Donati**, application of spectrographic analysis to the detection of rare elements in Italian materials, ii, 417.
Porlezza, C., and **U. Gatti**, action of calcium hydride on certain organic compounds. I. Acetone, i, 1042.
Porter, C. R. See **G. T. Morgan**.
Porter, E. S., vanadium in petroleum, ii, 767.
Porter, F., automatic Töpler pump, ii, 540.
Porter, F. See also **M. Shepherd**.
Porter, P. K., and **W. A. Noyes**, molecular rearrangements of the camphor series. XIV. Structure of *isocampholactone*, i, 45.
Porthheim, L. See **M. Eisler**.
Portillo, R. See **E. Moles**.
Posepal, V., variations in the specific refraction of gases with pressure below one atmosphere, ii, 218.
Posner, T., and **W. Kemper**, indigotin group. IV. New vat dye prepared from indigotin and ethyl phenylacetate, i, 1237.
Posner, T., and **G. Schreiber**, unsaturated compounds. XI. Action of free hydroxylamine on cinnamic acid and its nuclear homologues, i, 963.
Posner, T., and **E. Wallis**, indigotin group. V. Derivatives of "thioindigo," i, 1334.
Post, F. See **R. Anschütz**.
Potapenko, G., the electrical absorption and dispersion spectra of methyl and ethyl alcohol in the region $\lambda\lambda$ 30 to 90 cm., ii, 79.
Potel, E., some glucosides and galactosides of thiols, i, 15.
Poth, E. J., and **J. R. Bailey**, reduction of semicarbazones, i, 226.
 behaviour of semicarbazides at elevated temperatures, i, 226.
Potter, F. de, effect of oxidising agents on diphtheria toxin, i, 1149.
Pouisois, R. See **A. Berthelot**.
Poulssois, E., durability of vitamin-A of cod-liver oil, i, 1388.

- Pound, J. R.**, electrical conductance of mixtures of aniline, acetic acid, and water, ii, 727.
- Pound, J. R.**, and **R. S. Russell**, properties of mixtures of aniline, water, and some fatty acids, ii, 389.
- Powell, S. G.**, β -phenoxypropionic acid and some of its derivatives; chrom-anone, i, 287.
- Powell, W. J.**, and **H. Whittaker**, lignin. I. Flax lignin and some derivatives, i, 375.
determination of pentosans (furfuraldehyde), in wood cellulose, ii, 354.
- Powers, W. L.** See **R. E. Stephenson**.
- Powick, W. C.**, compounds developed in rancid fats, with observations on the mechanism of their formation, i, 487.
- Powick, W. C.**, and **R. Hoagland**, chemical composition of edible viscera from meat-producing animals, i, 1371.
- Praetorius, A.**, determination of the constitution of the eutectic mixture of methyl, ethyl, and isobutyl oxamates, i, 839.
- Prandtl, W.**, contamination of hydrogen by sulphur, and a sensitive test for very small quantities of sulphur, ii, 563.
- Prandtl, W.**, and **A. Grimm**, search for the element of atomic number 61, ii, 615.
- Prandtl, W.**, and **K. Huttner**, separation of the rare earths by basic precipitation. VII. Preparation of pure praseodymia, ii, 615.
- Prandtl, W.**, and **J. Rauchenberger**, separation of rare earths by basic precipitation. VI., ii, 48.
- Prasad, M.**, viscosities of some univalent salts of higher fatty acids in organic solvents, ii, 726.
- Prasad, M.** See also **S. S. Bhatnagar**.
- Prát, S.**, physico-chemical properties of plant nutrient solutions, ii, 739.
- Pratt, D. D.**, and **R. Robinson**, a synthesis of pyrylium salts of anthocyanidin type. III. A new synthesis of pelargonidin chloride, i, 305.
- Pratt, D. D.**, **R. Robinson**, and **P. N. Williams**, a synthesis of pyrylium salts of anthocyanidin type. IV. Flavylum salts related to chrysin, apigenin, and luteolin, i, 306.
- Pratte, P. K.** See **L. McMaster**.
- Frausnitz, P. H.**, Soxhlet extraction apparatus, ii, 247.
- Pregl, F.**, micro-muffle, ii, 774.
centrifugal filter, ii, 774.
- Preiss, J.**, and **A. Dussik**, carbonates of the rare earths. I. Conditions of formation and hydrolysis of the cerite-earth carbonates, ii, 261.
- Preiss, J.**, and **N. Rainer**, carbonates of the rare earths. II. Thermal decomposition of the cerite-earth carbonates, ii, 262.
- Prentiss, A. M.**, specific heat and thermal diffusivity of certain explosives. III., i, 844.
- Prentiss, A. M.** See also **B. J. Alpers**, and **G. P. Grabfield**.
- Prescher, J.**, use of bromine for the volumetric determination of arsenic and antimony, and in Winkler's method for the determination of the bromine-iodine value (of oils), ii, 275.
- Preston, G. D.** See **E. A. Owen**.
- Prewitt, P. V.**, lipase production by the liver, i, 117.
- Přibyl, E.**, **V. Suk**, and **J. Zlámal**, protein coagulation in drops. V. Influence of genus, sex, and age of animals on the precipitability of the blood-serum, i, 1251.
- Price, N. J.**, and **C. S. L. Hawkins**, determination of the specific gravity of solutions of ammonia, ii, 331.
- Price, P. H.**, gold-beater's skin test for tannins, ii, 209.
osmium tetroxide as a reagent for the gold-beater's skin test for tannins, ii, 574.
attempt to extend Mitchell's colorimetric method to the determination of pyrocatechol tannins, ii, 707.
- Price, T. W.**, the decomposition of substituted carbamyl chlorides by hydroxy-compounds. I. The reaction between phenylmethylcarbamyl chloride and ethyl alcohol at different temperatures, i, 280.
- Prideaux, E. B. R.**, and **A. T. Ward**, the dissociation constant of boric acid, ii, 171.
dissociation constants of phosphoric acid, ii, 251.
neutralisation of mixtures of acids, and a universal buffer mixture, ii, 270.
- Priest, I. G.**, apparatus for the determination of colour in terms of dominant wave-length, purity, and brightness, ii, 247.
- Priestley, H.** See **H. M. Hindmarsh**.
- Prince, A. J.** See **J. R. Partington**.
- Prince, A. L.** See **A. W. Blair**.
- Pring, J. N.**, determination of the affinity constants of bases by the hydrogen and quinhydrone electrodes, ii, 596.

- Pringsheim, H.** [with *A. Beiser, K. Wolfsohn, L. Leibowitz, and W. Kusenack*], starch. XII. Constitution of starch, glycogen, and lichen starch, i, 1170.
- Pringsheim, H., and A. Beiser**, "limit" dextrin and a complement of the amylases. III., i, 1142.
- Pringsheim, H., and A. Gorgas**, components of wood spirit oil. II., i, 1158.
- Pringsheim, H., and G. Kohn**, inulin and inulase. IV., i, 470.
- Pringsheim, H., and W. Kusenack**, lichenin and lichenase, i, 1144.
- Pringsheim, H., and J. Leibowitz**, hemicellulose. IV. Cellobiase and lichenase, i, 233.
- starch. IX. Constitution of the polyamyloses, i, 714.
- reversion synthesis. I. Action of yeast maltase, i, 1169.
- Pringsheim, H., and K. Schmalz**, the limiting hydrolysis of starch and a complement of the amylases. II., i, 106.
- Pringsheim, H., and A. Steingroever**, starch. XI. Halogen compounds of the polyamyloses, i, 1170.
- Pringsheim, H., and K. Wolfsohn**, starch. X. Different structures of the two constituents of starch, i, 714.
- Pringsheim, H.** See also *H. von Hoesslin, and (Sir) J. C. Irvine*.
- Pringsheim, P.** See *E. Gaviola*.
- Prins, H. J.**, an extension of the equation for the velocity constant of a unimolecular reaction, ii, 99.
- Prisley, F.** See *R. R. Read*.
- Pritchard, F.** See *F. Challenger*.
- Prochazka, J.**, determination of β -naphthol in α -naphthol and α -naphthol in β -naphthol, ii, 70.
- Procopiu, S.**, spectra of arcs between metal poles in various media and in vacuo, ii, 364.
- ultimate lines in the spectra of the electric arc, ii, 364.
- width of lines in electric arc spectra at various pressures, ii, 637.
- Proebsting, E. A.** See *B. Stuber*.
- Prokopp, S.** See *E. Späth*.
- Prost, C.** See *P. Brenans*.
- Pryde, J.**, monocarboxylic acids derived from sugars. II. Methylation of tetramethylgluconic acid, i, 486.
- Pryde, J., and R. W. Humphreys**, methylation of the cerebrosides of ox brain, i, 1005.
- Przeborowski, J.** [with *M. Fleissner, and A. Sabrodina*], influence of neutral salts on the potential of the hydrogen electrode, ii, 87.
- Przibram, K.**, discoloration and luminescence due to Becquerel rays, ii, 85.
- Przylecki, St. J.** See *E. F. Terroine*.
- Psille, H.** See *E. Benary*.
- Pucher, G. W.**, determination of sugar in urine, ii, 572.
- Pucher, G. W.** See also *G. E. Youngburg*.
- Püringer, K.**, comparative plant chemistry. VIII. *Chamænerium angustifolium*, i, 815.
- Pugh, W.** See *J. S. Thomas*.
- Pummerer, R., and K. Bittner**, hexaphenyl, the linear chain of six benzene nuclei, i, 381.
- Pummerer, R., and A. Koch**, caoutchouc. II. Hydrocaoutchouc and a crystalline form of caoutchouc, i, 1214.
- Puri, A. N.** See *E. M. Crowther*.
- Purmann, L.** See *K. Freudenberg*.
- Purvis, J. E.**, the absorption spectra of some organic and inorganic salts of didymium, ii, 6.
- the absorption spectra of solutions of benzene and some of its derivatives, ii, 7.
- absorption spectra of some derivatives of phenol and other substances, ii, 219.
- Pushin, N. A., and E. V. Grebenshchikov**, dependence on pressure of the adiabatic cooling of some organic substances, ii, 820.
- Putnam, M. E.**, melting point of acetylsalicylic acid, i, 1070.
- Putochin, N.**, preparation of hydrazine, its salts and hydrate, ii, 751.
- Putzeys, T.** See *T. W. Richards*.
- Puxeddu, E., and E. Manca**, radioactive chrysocoll from the Bena de Padru mine, ii, 494.
- Pyman, F. L.** See *I. E. Balaban, R. Forsyth, and C. E. Hazeldine*.
- Pyriki, C.**, colorimetric determination of small quantities of lead and copper in drinking water, ii, 702.

Q.

- Quam, G. N.** See *O. R. Sweeney*.
- Quasebarth, K.** See *W. Schrauth*.
- Quast, P.**, the extraction of the concretion gland and nephridium of *Cyclostoma elegans*, i, 348.
- Quastel, J. H.**, fermentation of the unsaturated dicarboxylic acids. I. Fumaric acid, i, 803.
- Quastel, J. H., and M. D. Whetham**, equilibria between succinic, fumaric, and malic acids in the presence of resting bacteria, i, 913.

Quayle, O. R. See J. B. Conant.

Quick, A. J., synthesis of mentholglycuronic acid in the rabbit, i, 1370.

determination of mentholglycuronic acid in urine, ii, 876.

Quilico, A. See G. R. Levi.

R.

Raach, A. See E. Zintl.

Radeliffe, L. G., and R. Grindley, *n*-amylaniline, i, 1182.

Radu, A. See F. Paneth.

Radulescu, D., spirans. XI. Synthesis of dispirans, i, 58.

spirans. XII. Heterocyclic dispirans and the nature of the basic properties of the imino-group, i, 215.

Rae, W. N., uncommon animal fats, i, 366.

Räth, C., intramolecular condensation reactions of aminoacetals and aminoaldehydes. I. Synthesis of dihydroquinoline and certain homologues, i, 555.

intramolecular condensation reactions of aminoaldehydes and aminoacetals. II. Course of the reaction in the formation of dihydroquinoline and a new preparation of indole derivatives, i, 667.

constitution of Roth's 2-stilbazolealkine and synthesis of 2-stilbazoleisoalkine, i, 768.

Räth, C. See also A. Binz.

Raethjen, P., Hall effect and thermoelectric power, ii, 378.

Raffaghello, M. See M. Garino.

Ragionieri, R. See G. Canneri.

Raiford, L. C., and J. R. Coutare, influence of weight of acyl in the migration from nitrogen to oxygen. II., i, 1304.

Raiford, L. C., and C. E. Greider, rôle of weight of acyl in the migration from nitrogen to oxygen, i, 384.

Raiford, L. C., R. Taft, and H. P. Lankelma, steric relations in the acylation of aromatic amines and aminophenols, i, 1183.

Raiford, L. C., and C. M. Woolfolk, steric hindrance in the migration of acyl from nitrogen to oxygen, i, 1303.

Raiment, P. C. See V. Coates.

Rainer, N. See J. Preiss.

Raiziss, G. W., and M. Severac, organic mercury compound with powerful germicidal properties, i, 911.

Rakuzin, M. A., fractionation of gelatin by extraction with alcohol and precipitation with aluminium hydroxide and barium chloride, i, 677.

Rakuzin, M. A., and L. A. Itakin, negative adsorption. VII. Action of saturated solutions of salts on dried gelatin, ii, 833.

Rakuzin, M. A., and A. N. Nesmejanov, variation of the optical activity of sucrose on heating, i, 1288.

behaviour of aqueous and ethylalcoholic solutions of mercuric chloride towards different adsorbents. I. and II., ii, 461, 853.

Ralls, J. O. See E. A. Doisy.

Ram, A. J. See T. Varahalu.

Raman, C. V., structure of molecules in relation to their optical anisotropy, ii, 512.

Raman, C. V., and A. S. Ganesan, spectrum of neutral helium. II., ii, 436.

Raman, C. V., and K. R. Ramanathan, diffraction of X-rays in liquids, fluid crystals, and amorphous solids, ii, 816.

Ramanathan, K. R. See C. V. Raman.

Ramann, E., and H. Sallinger, indicators for use in determining the acidity of soils, ii, 270.

Ramart, (Mme.) P., $\alpha\alpha\beta$ -triphenylpropionic acid and some of its derivatives, i, 171, 641.

preparation of benzyl diphenylalkylacetates and the corresponding acids by means of sodamide and alkyl iodides, i, 286.

molecular transpositions; preparation and dehydration of $\alpha\gamma$ -triphenyl- $\beta\beta$ -dimethylpropan- α -ol, i, 1062.

intramolecular change; identification of the products of dehydration of $\alpha\gamma$ -triphenyl- $\beta\beta$ -dimethylpropan- α -ol, i, 1189.

Ramart, (Mme.) P., and A. Haller, syntheses by means of sodamide; preparation of benzyl phenylalkylacetates and the corresponding acids, i, 732.

Ramart, (Mme.) P. See also A. Haller.

Rambeck, O. See E. Bødtker.

Ramge, O. See W. Meigen.

Ramon, G., diphtheria toxin and antitoxin; flocculating power and immunising properties, i, 463.

properties of diphtheria antitoxin, i, 1149.

Rana, T. C. See N. A. Yajnik.

Ranc, A. See H. Bierry.

Randall, F. C. See W. E. Garner.

- Ranedo, J., and A. León, catalytic hydrogenation of *p*- and *o*-hydroxydiphenyl, i, 849.
- Rankin, J. See R. D. Haworth.
- Rao, B. S. V. R. See T. Varahalu, and Y. Venkataramaiah.
- Raper, H. S. See H. D. Kay.
- Rapport, D. [with J. Evenden], animal calorimetry. XXV. Relative specific dynamic action of various proteins, i, 1253.
- Rapport, D., R. Weiss, and F. A. Csonka [with J. Evenden], animal calorimetry. XXVIII. Respiratory metabolism of a young pig as influenced by food and benzoic acid, i, 1254.
- Rapport, D. See also M. Ringer, and R. Weiss.
- Rask, O. S. See C. L. Alsberg.
- Rassow, B., and E. Dörr, cellulose nitrate, ii, 790.
- Rassow, B., and M. Wadewitz, the viscose reaction, i, 374.
- Rassow, B. See also M. Wadewitz.
- Rastelli, G. See R. Ciusa.
- Rau, H., observations of the Doppler effect in canal ray line and band spectra, ii, 134.
- Rau, Helene. See H. Wieland.
- Rau, M. G., and J. L. Simonsen, oils and fats from the seeds of Indian forest plants. VII. Oil from the seeds of *Salvia plebeia*, R. Br., i, 609.
- Rau, M. G. See also R. M. Parker.
- Rauchenberger, J. See W. Prandtl.
- Rauchhaupt, O. See W. Dilthey.
- Ray, E. L. See L. A. Congdon.
- Ray, G. B. I. Oxidation of sodium lactate by hydrogen peroxide. II. Effect of cystine and glycine on the oxidation of sodium lactate by hydrogen peroxide, i, 829.
- Rây, (Sir) P. C., synthesis of cyclic polysulphides. I., i, 759.
- Rayleigh, (Lord), non-luminous oxidation of phosphorus in an oxygen atmosphere, ii, 605.
- light of the night sky, ii, 642.
- Read, B. E., toxicity of chaulmoogra oil, i, 1377.
- Read, J., and G. J. Burrows, dilution of ethylene bromohydrin with water, i, 1158.
- Read, J., H. G. Smith, and R. S. Hughesdon, piperitone. VII. The constitution of piperitone, i, 301.
- Read, J. See also H. G. Smith.
- Read, R. R., and H. Hibbert, carbohydrates and polysaccharides. IX. Synthesis of 2:3-dimethylcyclopenten-aldehyde, i, 709.
- Read, R. R., and F. Pringle, *tert*-butyl alcohol, i, 822.
- Read, R. R. See also H. T. Clarke, and H. Hibbert.
- Reade, T. H., *p*-bromophenyltrimethylammonium perhalides, i, 277.
- Reade, T. H., and S. A. Sim, *p*-iodophenyltrimethylammonium perhalides, i, 278.
- Rebbeck, J. W., and J. B. Ferguson, electrolysis of soda-lime glass. I. Evolution of gas and its relation to sorption and conductivity, ii, 840.
- Rebello, S., oligodynamic properties of insoluble mercury compounds, i, 1149.
- solubility of mercury salts in protein [solutions], ii, 684.
- periodic diffusion of insoluble mercury salts in gel cultures, ii, 684.
- Rebière, G., synthesis of colloidal micelles; the silver micelle, ii, 661.
- Reboul, G., and Bodin, production of radiations between the ultra-violet and X-rays, ii, 578.
- Recordai, G., Beckurts' method for determining the alkaloids in cinchona extract, ii, 211.
- Reccoura, M. A., action of acetic anhydride on hydrated metallic salts; "acetylated" salts, i, 827.
- Reding, R., and A. Slosse, effect of magnesium sulphate and metallic magnesium on metabolic exchanges, i, 237.
- Reed, H. S., and A. R. C. Haas, effect of hydroxyl-ion concentration on the growth of walnut roots, i, 922.
- effect of sodium chloride and calcium chloride on growth and composition of young orange trees, i, 923.
- Reeh, K. See G. Jander.
- Reeve, L., micro-gas analysis, ii, 775.
- Regenbogen, A., and N. Schoorl, a molecular compound of caffeine and salicylic acid, i, 199.
- Reh, A. See K. Hess.
- Rehbinder, P., dependence of surface activity and surface tension of solutions upon temperature and concentration, ii, 662.
- Reich, R. See A. Job.
- Reichert, J. S., and J. A. Nienwand, catalytic condensation of acetylene with benzene and its homologues, i, 156.
- Reichinstein, D. [with P. Bernays], adsorption isotherms, ii, 22.
- Reid, E. E. See A. B. Brown, D. G. Foster, F. C. Hahn, A. S. Holt, C. H. Milligan, and W. R. Waldron.

- Reif, *G.*, determination of dulcin [*p*-phenetylcarbamide] by means of xanthidrol, ii, 575.
- Reiger, *R.*, kinetics of gelatinisation and its general significance, ii, 741.
- Reihlen, *H.*, space significance of the co-ordination number in polynuclear compounds. II. Constitution of the violet chromic acetate, i, 826.
- Reihlen, *H.*, and *A. Sapper*, secondary valency of the hydroxyl group. III. Polynuclear chain-forming complex salts of protocatechualdehyde, ii, 384.
- Reimer, *M.*, benzyldenepyrvic acid [styrylgyoxylic acid] and its esters. I. The action of sunlight on crystalline methyl styrylgyoxylate, i, 642.
- Reindel, *F.*, new class of indigoid dyes, i, 1235.
- Reindel, *F.*, and *L. Schuberth*, attempted syntheses of *m*-related ring systems. II., i, 541.
- Reinfurth, *E.* See *C. Neuberg*.
- Reinhard, *A. W.*, formation of starch from sugar by the leaves of higher plants, i, 1154.
- Reinhart, *F.* See *H. Leuchs*.
- Reinwein, *H.*, do creatine and creatinine give the diazo-reaction? i, 948.
- Reinwein, *H.*, and *F. Thielmann*, urine in pernicious anaemia, i, 1010.
- Reinwein, *H.* See also *D. Ackermann*.
- Reissert, *A.*, and *K. Brüggemann*, action of potassium cyanide on aromatic thiocarbimides, i, 846.
- Reissert, *A.*, and *A. Händeler*, action of formaldehyde on formylated aromatic amines and on isatin, i, 845.
- Reissert, *A.*, and *K. Hessert*, reduction products of *o*-nitromandelonitrile, i, 853.
- Reissert, *A.*, and *H. Hoppmann*, products of the action of ammonia on isatin, i, 874.
- Rekschinski, *V.*, osmiridium and the separation therefrom of metals of the platinum group, ii, 772.
- Remi, *W.* See *A. Klemenc*.
- Remy, *H.*, fumes resulting from chemical reactions. I. Size of the particles of chemical fumes, ii, 678.
- Remy, *H.* [with *M. Köhn*], chemistry of the platinum metals. V. Thermal decomposition of ruthenium trichloride and ruthenium dioxide, ii, 770.
- Remy, *H.*, and *C. Breimeyer*, chemistry of the platinum metals. IV. Alkali-ruthenium double sulphites. II., ii, 54.
- Renscher, *F.* See *G. F. Hüttig*.
- Rennert, *E.* See *M. Bergmann*.
- Renzo, *d.* See *Di Renzo*.
- Resenvelt, *P. V.* See *M. L. Crossley*.
- Rettig, *P.* See *M. Battagay*.
- Reus, *H. J. W.* See *H. I. Waterman*.
- Reverdin, *F.*, *o*-nitrotoluene-*p*-sulphon-*p*-aniside and its nitration products, i, 727.
- nitration of derivatives of *p*- and *m*-aminophenols, i, 1306.
- Revoltella, *G.*, preparation of dried urease and determination of urea in normal and pathological urines, i, 474.
- Rewolle, *A.* See *H. Wieland*.
- Reychler, *A.*, susceptibility of silver bromide to reduction, ii, 256.
- photochemical studies. II. Reduction of silver bromide in the presence of gelatin, ii, 336.
- photochemical studies. III. Reduction of silver bromide in the photographic plate, ii, 336.
- Reynolds, *F. W.*, rapid analysis of sugars. Purification and concentration of enzyme solutions, i, 464.
- Rhein, *U.* See *E. Wilke-Dörfurt*.
- Rheimer, *A.* See *H. Staudinger*.
- Rbind, *D.* See *W. N. Nicholson*.
- Rhino, *F.* See *K. Freudenberg*.
- Rhode, *H.* See *W. Heubner*.
- Rhodes, *J. E. W.* See *G. W. F. Holroyd*.
- Riabouschinsky, *N. P.* See *I. A. Smorodincev*.
- Ribaud, *G.* See *G. Friedel*.
- Ricca, *B.* See *I. Bellucci*.
- Riccomanni, (*Miss*) *C.*, relations between chemical constitution and taste, i, 667.
- Rice, *F. O.*, theory of chemical reactivity, ii, 98.
- Rice, *G. P.*, the isomeric esters of *p*-methoxybenzoylacrylic acid, i, 287.
- isomeric esters of *p*-ethoxybenzoylacrylic acid, i, 1314.
- Rieh, *A. R.*, the site of origin of bilirubin, i, 238.
- Richards, *E. M.* See *T. M. Lowry*.
- Richards, *M. B.*, *W. Godden*, and *A. D. Husband*, influence of variations in the sodium-potassium ratio on the nitrogen and mineral metabolism of the growing pig, i, 900.
- Richards, *T. W.*, internal pressure of solids, ii, 723.
- Richards, *T. W.*, and *T. Putzeys*, atomic weight of lead from the Belgian Congo, ii, 111.
- Richards, *T. W.*, and *W. T. Richards*, preliminary attempt to measure gravimetrically the distance effect of chemical affinity, ii, 98.
- effect of a magnetic field on the potential of hydrogen occluded in iron, ii, 149.

- Richards, T. W.**, and **E. P. R. Saerens**, compressibility of the chlorides, bromides, and iodides of lithium, rubidium, and caesium, ii, 408.
- Richards, T. W.**, **C. L. Speyers**, and **E. K. Carver**, determination of surface tension with very small volumes of liquid, and the surface tension of octanes and xylenes at several temperatures, ii, 661.
- Richards, W. T.** See **T. W. Richards**.
- Richardson, A. S.**, **C. A. Knuth**, and **C. H. Milligan**, heterogeneous catalysis. I. Selective action of the nickel catalyst in the hydrogenation of certain vegetable oils, i, 705.
- Richardson, A. S.** See also **C. H. Milligan**.
- Richardson, H. B.**, and **W. S. Ladd**, clinical calorimetry. XXXIV. Ketosis and the respiratory exchange in diabetes, i, 444.
- Richardson, L. B.**, and **J. C. Woodhouse**, adsorption of mixed gases by charcoal. I. Carbon dioxide and nitrous oxide, ii, 23.
- Richardson, O. W.**, electron emission from metals as a function of temperature, ii, 291.
thermodynamics of electron emission, ii, 376.
photoelectric and photochemical activity, ii, 443.
- Richardson, O. W.**, and **T. Tanaka**, continuous spectrum of hydrogen, ii, 217.
- Richet, C.**, (*Mlle.*) **E. Bachrach**, and **H. Cardot**, simultaneity of two contradictory toxic effects (immunity and anaphylaxis) on the same cell, i, 463.
- Richet, C.**, and **H. Cardot**, irregularities in lactic acid fermentation, i, 1384.
- Richet, C., jun.**, action of formates on the growth of certain plants in pot cultures, i, 925.
- Richter, H.** See **B. Neumann**.
- Richter, K.** See **M. Le Blanc**.
- Richtmyer, F. K.**, and **F. W. Warburton**, the absorption of X-rays by iron, cobalt, nickel, and copper, ii, 140.
X-ray absorption coefficients of cobalt and nickel, ii, 815.
- Rideal, E. K.**, and **C. G. L. Wolf**, destruction of rennin by agitation; a case of catalysis at an air-liquid interface, i, 1147.
- Rideal, E. K.** See also **J. S. Dunn**, **A. K. Goard**, **W. W. Hurst**, **V. K. LaMer**, and **R. G. W. Norrish**.
- Ridge, B. P.**, determination of nitrogen in cotton, ii, 348.
- Ridgway, L. R.**, and **R. Robinson**, some benzopyrylium salts, i, 307.
- Ridley, G. N.**, chromium dioxide, ii, 618.
- Ridyard, H. N.**, metal to glass joint, ii, 322.
- Riebensahn, W.** See **Tetralin G. m. b. H.**
- Riedel, J. D.**, preparation of deoxycholic acid, i, 179.
preparation of an unsaturated bile acid, i, 179.
- Rieder, R.** See **A. Skrabal**.
- Riedler, G.** See **H. von Wartenberg**.
- Rieman, W.** See **P. A. van der Meulen**.
- Riemar, K.** See **R. Anschütz**.
- Riepenkröger, K.** See **R. Anschütz**.
- Riesenberg, H.** See **T. Sabalitschka**.
- Riesenfeld, E. H.**, sulphito-cobalt-ammines, ii, 342.
- Riesenfeld, E. H.**, and **M. Beja**, vapour pressure measurements for pure ozone, ii, 248.
thermal formation of ozone, ii, 470.
- Riesser, O.**, a new method of preparing *s*-diphenylguanidine; its pharmacological effects, i, 246.
a new titrimetric method for determining formic acid, ii, 73.
- Riethmüller, H.** See **W. Wislicenus**.
- Riethof, G.** See **C. Drucker**.
- Riéty, L.**, electromotive force of filtration, ii, 528.
- Rietz, K.** See **D. Holde**.
- Rigler, R. W.**, and **R. Ringel**, comparative studies on narcosis with chloroform and dichloroethylene; effect on protein balance of rats, i, 797.
- Rigoli, G.** See **G. Ruggeri**.
- Riiber, C. N.**, mutarotation. III. Solution volume and refraction constants of α - and β -glucose, ii, 806.
- Biley, H. R.**, atomic dimensions and gaseous hydride formation, ii, 653.
- Rimbert, E.** See **E. Büllmann**.
- Rinaldi, R. H.** See **C. R. Darling**.
- Rinderknecht, R.** See **H. Rupe**.
- Rinehart, H. W.**, and **T. B. Johnson**, chemical behaviour of α - and β -hydroformamine cyanides (methylenamino-acetonitriles), i, 1052.
- Rinehart, H. W.** See also **T. B. Johnson**.
- Ringel, R.** See **R. W. Rigler**.
- Ringer, M.**, influence of insulin on phloridzin diabetes, i, 446.
- Ringer, M.**, and **D. Rapport**, animal calorimetry. XXIII. Influence of the metabolism of the nucleic acids on heat production, i, 450.

- Rinkenbach, W. H.** See *C. A. Taylor*.
- Rinkes, I. J.**, *m*-chloroaniline and *m*-chlorophenol, i, 34.
- Rinne, F.**, and **W. Krüger**, chemical effects with crystals. VI. Etching and solution phenomena of aragonite, ii, 257.
- Rinne, F.**, and **H. Mielke**, chemical effects with crystals. VII. Etching and solution phenomena of magnetite, ii, 265.
- Ripan, R.** See *G. Spacu*.
- Ripper, J.** See *A. Heiduschka*, and *D. Holde*.
- Ripper, K. M.** See *V. I. Minaev*.
- Ris, H.** See *F. Fichter*.
- Risch, C.**, titrimetric determination of hydrogen-ion concentrations, ii, 697.
- Risseghem, H. van**, refractive indices of hexanes and hexenes, i, 821.
- Ritchie, W. S.**, and **C. R. Moulton, P. F. Trowbridge**, and **L. D. Haigh**, animal nutrition. IV. Nitrogen, ash, and phosphorus distribution in beef flesh, i, 1256.
- Ritsert, K.** See *C. Mannich*.
- Ritter, F.** See *A. Thiel*.
- Rivett, A. C. D.** See *N. B. Lewis*.
- Rivière, G.**, and **G. Pichard**, modification facilitating the use of a Lunge nitrometer and allowing its general application, ii, 694.
- Roasio, G.**, the crystallisation of certain salts in the magnetic field, ii, 90.
- Robbins, W. J.**, isoelectric points for the mycelium of fungi, i, 475.
- Roberts, B. H.** See *R. Robinson*.
- Roberts, H. S.**, standard melting points at high temperatures, ii, 300.
- Robertson, A.** See *G. G. Henderson*.
- Robertson, A. C.** See *V. L. Bohson*.
- Robertson, J.** See *T. S. Patterson*.
- Robertson, J. B.**, and **A. J. Pelling**, determination of nitrates by electro-metric titration, ii, 566.
- Robertson, J. K.**, intensity measurements of spectral lines, ii, 2.
- Robertson, J. M.** See *G. G. Henderson*.
- Robertson, T. B.**, influence of hydrolysis on the capacity of proteins to bind acids and bases, i, 678.
- Robertson, T. B.**, and **A. B. Anderson**, preparation of insulin, i, 1017.
- Robertson, W. A.** See *R. M. Parker*.
- Robin, (Mlle.) I.** See *V. Auger*.
- Robin, P.**, chloroamidines, i, 159.
- Robinovitch, L. G.**, and **G. W. Stiles**, chemical basis for the treatment of tuberculosis; action of steapsin and insulin on tubercle bacilli, i, 1375.
- Robinson, C. S.**, photolysis of potassium nitrate, ii, 675.
- Robinson, (Mrs.) G. M.**, synthesis of the higher monoalkylmalonic acids, i, 261.
- Robinson, (Mrs.) G. M.**, and **R. Robinson**, mechanism of E. Fischer's synthesis of indoles; application of the method to the preparation of a pyrindole derivative, i, 666.
- Robinson, H. W.** See *J. H. Austin*.
- Robinson, M. E.**, comparison of certain oxidising enzymes of the higher and lower plants, i, 921.
- haemoglobin and methaemoglobin as oxidative catalysts, ii, 320.
- Robinson, R.**, **H. G. Crabtree, C. R. Das, W. Lawson, R. W. Lunt, B. H. Roberts**, and **P. N. Williams**, some derivatives of benzopyrylium, i, 306.
- Robinson, R.**, and **S. Thornley**, 5-carboline and some derivatives, i, 1349.
- Robinson, R.** See also *G. R. Clemo, W. Lawson, R. C. Menzies, H. Nishikawa, D. D. Pratt, L. R. Ridgway*, and *(Mrs.) G. M. Robinson*.
- Robinson, R. H.**, action of sodium nitrite in the soil, i, 480.
- Robinson, W. O.** See *P. L. Gile*.
- Robison, R.**, and **K. M. Soames**, possible significance of hexosephosphoric esters in ossification. II. The phosphoric esterase of ossifying cartilage, i, 904.
- Robison, R.** See also *H. W. Goodwin, H. D. Kay*, and *M. Martland*.
- Rocard, V.**, extension of some results of the kinetic theory of gases, ii, 653.
- Rocasolano, A. de G.**, physico-chemical hypothesis on "ageing," ii, 740.
- Rochaix.** See *Cluzet*.
- Rockwood, E. W.**, mechanism of the action of amino-promoters on enzymes, i, 1148.
- Rockwood, E. W.**, and **W. J. Husa**, studies on enzyme action; the relationship between the chemical structure of certain compounds and their effect on the activity of urease, i, 351.
- Rodebush, W. H.**, ionisation of strong electrolytes, ii, 825.
- Roder, O.** See *O. Mumm*.
- Rodewald, C. W.**, and **R. Adams**, arsino-arylamino-alcohols, i, 341.
- Rodionov, W.**, and **S. Kagan**, nitro-methylmeconine, i, 1196.
- Rodionov, W. M.**, and **S. J. Manzov**, the preparation of $\beta\beta'$ -dinaphthyl ether, i, 160.

- Rodman, J. A.**, effect of temperature on the luminosity of radium compounds, ii, 379.
- Roe, J. H.**, determination of the hydrogen cyanide content of amygdalin by the aëration method, ii, 353.
- Röckemann, W.**, effect of phosphoric acid on excretion of chlorine, i, 1135.
- Röglspurger, L.** See **C. Feinberg**.
- Röhrs, W.** See **W. Biltz**.
- Roéland, C.** See **M. Piettre**.
- Roelen, O.** See **H. Tropisch**.
- Römer, G.** See **R. Schenk**.
- Rogan, F.** See **W. Pauli**.
- Roger, R.** See **A. McKenzie**.
- Rogers, A. F.**, kempite, a new manganese mineral from California, ii, 693.
- Rogers, J. S.** See **L. F. Bates**.
- Rohn, W.**, preparation of pure chromium by direct reduction of chromic oxide with hydrogen, ii, 617.
thermo-electric researches on nickel alloys, ii, 725.
- Rohner, L. V.** See **L. A. Congdon**.
- Rohrer, A.** See **L. Asher**.
- Rojahn, C. A.**, and **K. Fahr**, synthesis of pyrazolealdehydes. I., i, 91.
- Rojahn, C. A.**, and **A. Seitz**, synthesis of pyrazolealdehydes. II., i, 875.
- Rokkaku, T.** See **R. Majima**.
- Rolf, I. P.** See **P. A. Levene**.
- Rolla, L., V. Cuttica, and L. Fernandes**, separation of yttrium from the other elements of gadolinite, ii, 861.
- Rollefson, G. K.**, spectral series in the soft X-ray region, ii, 216.
- Roller, E. M.** See **N. A. Clark**.
- Rolton, (Miss) W. L.**, and **R. S. Troop**, effect of a magnetic field on the surface tension of a liquid of high susceptibility, ii, 390.
- Romani, E.**, salts of phenyldiguanidine, i, 847.
- Romei, W.** See **W. Swientoslawski**.
- Rona, P.**, and **C. van Eweyk**, investigation of amylase, i, 1264.
- Rona, P., C. van Eweyk, and M. Tennenbaum**, influence of alkaloids of the atropine, cocaine, and morphine groups on yeast invertase, i, 468.
- Rona, P.**, and **F. Lipmann**, effect of alterations in hydrogen-ion concentration on the precipitation of positive and negative iron hydroxide sols, ii, 596.
- Rona, P.**, and **W. B. Meyer**, the behaviour of eucupine and uric acid gels during dialysis; the distribution of ions, i, 200.
- Rona, P.**, and **E. Mislowitzer**, autolysis. II., i, 790.
- Rona, P., E. Mislowitzer, and S. Seidenberg**, autolysis. III. Autolysis of phosphorus-poisoned liver, i, 790.
- Rona, P.**, and **H. Petow**, susceptibility of lipases of various origin to toxins, i, 804.
- Ronžin, N.** See **M. Samec**.
- Ronzoni, E.**, ether anaesthesia. II. Anaesthetic concentration of ether for dogs, i, 111.
- Ronzoni, E., I. Koechig, and E. P. Eaton**, ether anaesthesia. III. Rôle of lactic acid in the acidosis of ether anaesthesia, i, 1258.
- Ronzoni, E.** See also **P. A. Shaffer**.
- Roon, J. D. van**, Lely's benzene theory, i, 628.
- Roon, J. D. van.** See also **H. Gelissen**.
- Root, E. W., jun.** See **H. D. Clough**.
- Rose, M. S.**, and **G. MacLeod**, digestion experiments with the raw white of egg. II. The digestibility of unbeaten in comparison of beaten whites, i, 444.
- Rose, W. C.**, nephropathic action of the dicarboxylic acids and their derivatives. I. Tartaric, malic, and succinic acids. II. Glutaric and malonic acids, i, 1374.
- Rose, W. C.**, and **G. J. Cox**, relation of arginine and histidine to growth, i, 1370.
- Rosen, I.** See **J. A. Fordyce**.
- Rosen, S.** See **S. Fränkel**.
- Rosenbach, A.** See **A. Schönberg**.
- Rosenberg, M. E.** See **E. J. Cuy**.
- Rosenberger, K.** See **K. Schaum**.
- Rosenfeld, A.** See **J. Zalkind**.
- Rosenfeld, L.**, uric acid excretion in the dog, i, 1135.
influence of guanylic and adenylic acids on uric acid excretion, i, 1135.
coagulating property of papain, i, 1269.
- Rosenhain, W.**, solid solutions and inter-atomic relationships, ii, 229.
- Rosenhauer, E.**, remarkable reaction of phenylhydrazine; syntheses of azo-dyes from 2-methylated quinolinium and indolenium salts, i, 1002.
4-benzyl-2-methylquinoline, i, 1110.
- Rosenhauer, E.** [with **O. Dannhofer, A. Schmidt, and W. Schleifenbaum**], reactions of 2-methylene-1-alkyl-1:2-dihydroquinolines. I. Diazo-coupling of the methylene base in neutral solution, i, 1236.
- Rosenhauer, E.** [with **Alfred Schmidt, and W. Schleifenbaum**], quinoline dyestuffs, i, 768.
- Rosenheim, A.**, and **T. H. Li**, compounds of tervalent molybdenum and tungsten, i, 193.

- Rosenheim, A.**, and **M. Schapiro** [with **A. Italiener**], iso- and hetero-poly-acids. XIX. Molybdi-phosphites and -pyrophosphates; the structure of phosphorous acid, ii, 51.
- Rosenheim, A.**, and **H. Vermehren**, internally complex borates, i, 1194.
- Rosenheim, A.**, and **K. H. Yang**, iso- and hetero-poly-acids. XVIII. Vanadioiodates, vanadioperiodates and a few vanadiophosphates; the alkali-metric determination of vanadic acid, ii, 54.
- Rosenmund, K. W.**, and **T. Boehm**, 3:4:5-trihydroxycinnamic acid and the mechanism of Knoevenagel's cinnamic acid synthesis, i, 733.
- Rosenmund, K. W.**, and **C. Kittler**, hydriodoquinine and its transformation products, i, 982.
- Rosenmund, K. W.**, and **P. Langer**, the influence of the support on the activity of catalysts, ii, 161.
- Rosenmund, K. W.**, and **E. Pfankuch**, the catalytic reduction of the multiple carbon-nitrogen linking, i, 34.
- Rosenthal, A.** See **H. Walbaum**.
- Rosenthal, F.**, and **F. Lauterbach**, bile secretions. IV. Colorimetric determination of bile acids in human body fluids, ii, 431.
- Rosenthal, O.** See **C. Neuberg**.
- Rosenthaler, L.**, starch grains, i, 618.
- mustard oils [thiocarbimides], i, 949.
- microchemical detection of sulphuric acid as silver sulphate, ii, 123.
- crystal reactions of potassium, ammonium, and magnesium, ii, 782.
- microchemical detection. III. Copper, alkaloids, and the "psicain" base, ii, 785.
- Rosenthaler, L.**, and **A. Abelmann**, mercury compounds of purine derivatives, i, 110.
- Rosenthaler, L.**, and **M. Mosemann**, occurrence of alkaloids in nature. I. Common occurrence of alkaloids and tannides, i, 924.
- Ross, A.** See **Wilhelm Schneider**.
- Ross, G. S.** See **J. L. Gamble**.
- Ross, H.** See **C. H. Greene**.
- Ross, J. F.** See **G. F. Smith**.
- Ross, J. H.**, colour test for chloroform and chloral hydrate, ii, 352.
- Ross, J. H.**, and **J. M. Payne**, action of chloral on cellulose, i, 15.
- Ross, P. A.**, scattered X-rays, ii, 721.
- Rossenbeck, H.** See **R. Feulgen**.
- Rosset, H.**, determination of the temperature of miscibility [of liquids], ii, 495.
- Rossi, A.**, qualitative tests of some photographic developers, ii, 706.
- Rossi, G.**, properties of colloidal sulphur, ii, 330.
- properties of colloidal sulphur, ii, 404.
- colloidal state, ii, 459.
- Rosso, J. M.** See **L. A. Congdon**.
- Rostock, P.**, test-tube reaction for damage and death of tissues, i, 1260.
- Roth, G. B.**, biological standardisation of salvarsan and neosalvarsan, i, 1003.
- Roth, J.** See **E. Heuser**.
- Roth, W. A.**, **H. Ginsberg**, and **R. Lassé**, combustion micro-calorimeter, ii, 748.
- Rothberg, V. E.**, and **F. A. Evans**, I. Polin and Wu's method for the determination of blood sugar. II. A modification of the method, ii, 280.
- Rothe, J.** See **O. Gerngross**.
- Rothman, H.** See **K. Dressel**.
- Rothman-Manheim, I.** See **W. Stepp**.
- Rothwell, C.** See **J. N. Kugelmass**.
- Rotter, G.**, separation of mercury and cadmium by means of pyridine, ii, 569.
- Roubaix, de**, catalytic hydrogenation of oleic acid and commercial olein with nickel as catalyst, i, 705.
- Rouiller, C. A.** See **J. J. Abel**.
- Rousseaux, E.**, determination of nitrogen in non-homogeneous products, ii, 422.
- Routala, O.**, and **W. Nevvius**, dichloro-acetaldoxime, i, 369.
- Rouyer, E.** See **F. Bourion**.
- Row, K. K.** See **B. B. Dey**.
- Row, K. R.** See **A. L. Narayan**.
- Rowe, A. W.**, and **E. P. Phelps**, ethyl ether. II. Determination of peroxide as contaminant, ii, 876.
- Rowe, F. M.**, and **C. Levin**, identification of insoluble azo-colours on the fibre and of azo-pigments in substance, ii, 635.
- Rowe, H. N.** See **S. Dushman**.
- Rowland, B. W.** See **J. H. Mathews**.
- Rowley, H. J.** See **W. R. Hainsworth**.
- Roy, B. C.** See **J. N. Mukherjee**.
- Roy, D. C.** See **A. C. Sircar**.
- Roy, S. C.**, law and mechanism of the emission of electrons from hot bodies, ii, 223.
- Royer, L.**, mesomorphic state and magnetic birefringence, ii, 371, 652.
- Ruark, A. E.**, hydrogen Balmer series, and the impossibility of further corrections to the quantising of hydrogen atoms, ii, 281.
- Ruark, A. E.**, **F. L. Mohler**, and **R. L. Chenault**, fine structures in non-hydrogenic atoms, ii, 797.

- Buark, A. E., F. L. Mohler, P. D. Foote, and R. L. Chenault**, the spectra of metals of the fifth group, ii, 4.
spectra and critical potentials of fifth group elements, ii, 646.
- Buark, A. E.** See also **P. D. Foote**.
- Rubino.** See **Varela**.
- Rubinstein, H.** See **F. Feigl**.
- Rudberg, E.**, photochemical hydrolysis of [aqueous solutions of] monochloro- and monobromo-acetic acids and the Einstein law, ii, 467.
- Rudberg, E.** See also **H. von Euler**.
- Rüdel, W.** See **G. Grube**.
- Ruer, R., and K. Bode**, copper oxide and the atonic weight of copper, ii, 761.
- Ruff, O.**, system, chromium-carbon, ii, 51.
plasticity. I., ii, 492.
- Ruff, O., and H. Brintzinger**, reduction of thorium, zirconium, and titanium dioxides, ii, 53.
- Ruff, O., and E. Foerster**, high-temperature researches. XVI. Synthesis and decomposition of calcium carbide, ii, 256.
- Ruff, O., and W. Goebel**, plasticity. III. Plastic masses with aluminium oxide, ii, 488.
- Ruff, O., and H. Golla**, sulphur chloride and sulphur, ii, 672.
purification of commercial carbon disulphide from hydrocarbons, ii, 675.
compounds of aluminium, chlorine, and sulphur, ii, 684.
- Ruff, O., and H. Hartmann**, high-temperature researches. XVII. Vapour pressures of alkaline-earth metals, ii, 481.
- Ruff, O., and E. Hohlfeld**, active charcoal. II. Activity and content of foreign atoms, ii, 334.
- Ruff, O., and J. Moezala**, plasticity. II. Plastic masses with zirconium dioxide, ii, 492.
- Ruggeri, G.**, aromatic nitrolic acids, i, 53.
- Ruggeri, G., and G. Rigoli**, dioximes. XX., i, 1202.
- Ruggeri, G.** See also **G. Ponzio**.
- Ruggli, P., and A. Fischli**, dyeing processes. I. Fixation of acid wool dyes of the type of orange II., ii, 464.
dyeing processes. III. Fixation of some substantive cotton dyes, ii, 464.
dyeing processes. II. Determination of dyes in the dye bath, ii, 636.
- Ruggli, P., and W. Leonhardt**, hydroxyquinol derivatives of the isatogen series, i, 1106.
transformation of isatogen derivatives into isatins, i, 1343.
- Rule, H. G.**, optical activity and the polarity of groups attached to the asymmetric atom. I., ii, 645.
- Rumeau, G.**, keto-enol equilibrium of ethyl acetoacetate; accelerators and stabilisers, i, 939.
- Runge, G.**, isotopes of mercury and bismuth and the satellites of their spectral lines, ii, 446.
- Runkel, R.** See **E. Fromm**.
- Runne, H.** See **Gehe & Co., Akt.-Ges.**
- Rupe, H.**, influence of constitution on the rotatory power of optically active substances. XVI. Acetylene derivatives, ketones, carbylamines, i, 647.
- Rupe, H., and F. Becherer**, menthyl α -diacetyl- β -methylglutarate, i, 1073.
- Rupe, H., and J. Brin**, camphanlyl-carbinol, i, 753.
- Rupe, H., and C. Courvoisier**, the rotation dispersion of some homologous methylenecamphor derivatives, i, 192.
- Rupe, H., and R. Rinderknecht**, reduction of citronellal, i, 709.
- Rupe, H., and M. Schärer**, action of ferric chloride on hydroxymethylenecamphor, i, 193.
- Rupe, H., and E. Stöcklin**, isatin; condensation of isatin with phenyl-hydroxylamine, i, 764.
- Rupe, H., and F. Wiederkehr**, constitution of curcumone from curcuma [turmeric] oil, i, 1066.
- Rupp, E.**, simplified qualitative analysis of the ammonium sulphide group, ii, 205.
alkalimetric determination of chlorine and bromine solutions, with observations on iodine solutions, ii, 562.
extraction apparatus, ii, 670.
- Ruppert, F. von.** See **A. Kircher**.
- Ruschentzev, A.** See **S. Nametkin**.
- Rusk, R. D.**, absorption of hydrogen in potassium vapour arcs, ii, 808.
- Russell, A. S.**, complexity of the elements. I. Elements of odd atomic number, ii, 445.
complexity of the elements. II., ii, 812.
need for redetermination of the atomic weights of uranium, thorium, and radium, ii, 813.
- Russell, A. S.** See also **W. P. Widdowson**.
- Russell, H. N.**, singlet series in the spark spectrum of luminium, ii, 133.

- Russell, *H. N.* See also *K. T. Compton*, and *F. A. Saunders*.
- Russell, *R. S.* See *J. R. Pound*.
- Russell-Wells, *B.* See *P. Haas*.
- Russman, *A.* See *B. Stuber*.
- Rusznayák, *S.*, nephelometry of protein solutions, ii, 358.
- Rutherford, *E.*, capture and loss of electrons by α -particles, ii, 225.
- Rutherford, *E.*, and *J. Chadwick*, bombardment of elements by α -particles, ii, 296.
origin and nature of long-range particles from radium-C, ii, 814.
- Rutt, *C. H.* See *F. E. Francis*.
- Ruzicka, *L.*, the camphor and camphenilone series, i, 64.
- Ruzicka, *L.*, and *F. Balas*, higher terpene compounds. XXIII. *d*-Pimaric acid, i, 1311.
- Ruzicka, *L.*, *F. Balas*, and *F. Vilim*, higher terpene compounds. XXII. *l*-Pimaric acid, i, 732.
- Ruzicka, *L.*, and *J. Meyer*, higher terpene compounds. XVII. The gentle action of potassium permanganate on abietic acid, i, 172.
- Ruzicka, *L.*, and *S. Pontalti*, pinene. V. Preparation of α - and δ -pinene, i, 755.
- Ruzicka, *L.*, *H. Schinz*, and *J. Meyer*, higher terpene compounds. XVI. The carbon framework of abietic acid and dehydrogenating disruption in the abietic acid series, i, 171.
- Ruzicka, *L.*, and *M. Stoll*, higher terpene compounds. XVIII. The constitution of cadinene, i, 302.
higher terpene compounds. XIX. Cadinol from galbanum oil, i, 302.
higher terpene compounds. XX. Sesquiterpenes and sesquiterpene alcohols of camphor oil, i, 531.
higher terpene compounds. XXI. Constitution and isomerisation of α -camphorene, i, 532.
- Ruzicka, *L.* See also *H. Staudinger*.
- Ryan, *H.*, and *N. Cullinane*, action of the oxides and the oxy-acids of nitrogen on diphenylene oxide, i, 534.
- Ryan, *H.*, and *P. T. Drumm*, action of the oxides and the oxy-acids of nitrogen on diphenyl ether, i, 504.
- Ryan, *H.*, and *J. Keane*, action of the oxides and the oxy-acids of nitrogen on phenyl benzyl ether, i, 505.
action of the oxides and oxy-acids of nitrogen on β -naphthyl ethyl ether, i, 507.
- Ryan, *H.*, and *T. Kenny*, action of the oxides and the oxy-acids of nitrogen on diphenyl ethylene ether, i, 505.
- Ryschkewitsch, *E.*, graphite as a metallic modification of carbon, ii, 254.
- Ryschkewitsch, *E.*, and *E. Köstermann*, density of graphite, ii, 546.
- Rywosch, *D.*, relation between catalase and autoxidisable substances, i, 1264.
- S.
- Sabalitschka, *T.*, feeding of plants with aldehydes. V. Influence of formaldehyde on the function of plant enzymes, i, 1155.
- Sabalitschka, *T.*, and *F. Bull*, methods of dissolving chromic oxide, ii, 687.
- Sabalitschka, *T.*, and *K. R. Dietrich*, addition of bromine to fats and oils and the determination of the bromine value, ii, 707.
- Sabalitschka, *T.*, and *G. Kubisch*, influence of the base on the degree of conversion of primary salts of dibasic acids in aqueous solution, i, 830.
decomposition of potassium dichromate in aqueous solution, ii, 477.
determination of alkali carbonate in the presence of alkali hydrogen carbonate by Warder's method, ii, 500.
decomposition of sodium hydrogen sulphite in aqueous solution, ii, 608.
conversion of sodium hydrogen carbonate into sodium carbonate in aqueous solution at various temperatures, ii, 609.
- Sabalitschka, *T.*, and *H. Riesenberger*, assimilation of aldehydes by plants. II. Polymerisation of formaldehyde by *Phaseolus multiflorus* and *Pelargonium* with the formation of higher aldehydes, i, 475.
assimilation of aldehydes by plants. III. Does the presence of formaldehyde interfere with the determination of sugar and starch in the experimental plants of *T. Sabalitschka*? i, 475.
assimilation of aldehydes by plants. IV. Behaviour and detection of formaldehyde in plants and plant substances, i, 698.
- Sabalitschka, *T.*, and *M. W. Zaher*, determination of lupine alkaloids, particularly in lupine seeds, ii, 635.
- Sabathy, *R.* See *A. Zinke*.
- Sabatini, *G.*, determination of bile pigments in urine, ii, 795.

- Sabbatani, L.**, pharmacological investigations on iron. II. Colloidal ferrous sulphide prepared in presence of gelatin; experiments on rabbits by intravenous injections, i, 1376.
 pharmacological investigations on iron. V. Colloidal ferrous sulphide prepared in presence of gelatin; experiments on dogs by intravenous injections, i, 1376.
 pharmacological investigations on iron. I. Colloidal ferrous sulphide prepared in presence of gelatin, ii, 116.
- Sabetay, S.** See *M. Bergmann*.
- Sabrodina, A.** See *J. Przeborowski*.
- Sacharova, T. M.**, dependence of denitrification on the reaction of the medium, i, 1156.
- Sachs, G.**, mercury ethylmercapto-salts, i, 951.
 mercury ethylmercapto-hydroxides, i, 952.
- Sachs, G.**, and *R. Eberhartinger*, mercury derivatives of pyridine, i, 110.
- Sack, A.** See *Wilhelm Schneider*.
- Sadikov, V. S.**, the formation of carbon dioxide during the breakdown of proteins in the autoclave, i, 228.
 hydrolysis in an autoclave containing nitrogen, i, 228.
 products of the catalytic hydrolysis of horse hair, i, 241.
- Sadikov, V. S.**, and *N. D. Zelinski*, products of the catalytic hydrolysis of goose feathers, i, 1122.
- Saerens, E. P. R.**, compressibility of the alkali salts, ii, 334.
- Saerens, E. P. R.** See also *T. W. Richards*.
- Safranek, J.**, the magnetisation of alloys of nickel and electrolytic chromium, ii, 189.
 magnetisation of nickel-chromium alloys above the Curie point, ii, 342.
- Saha, M. N.**, and *N. K. Sur*, active modification of nitrogen, ii, 803.
- Šahović, K.**, the influence of guanidine on the frog, i, 123.
- Saillard, E.**, determination of raffinose in sugars; raffinose content of molasses, ii, 632.
- Saint, S. J.** See *N. M. Comber*.
- St. John, A.**, crystal structure of manganese dioxide, ii, 862.
- Saito, S.**, use of amalgams in volumetric analyses. X. Determination of phosphoric acid with uranyl salts, ii, 780.
- Sakamoto, T.** See *K. Hara*.
- Sakellarios, E.**, certain double salts of diazo-compounds with lead tetrachloride, i, 220.
- Sakellarios, E.**, preparation of *o*-nitrodiphenylarsinic acid, i, 1247.
- Sakellarios, E.**, and *T. Kyrimis*, reaction of organo-magnesium compounds with cupric chloride, i, 381.
- Sakuma, S.**, the so-called autoxidation of cysteine, i, 12.
- Sakuma, S.** See also *O. Warburg*.
- Sala, R.** See *G. Charrier*.
- Salamon, M. S.**, melting point and iodine value of refined natural *d*-camphor, ii, 74.
- Salauze, J.**, electrolytic preparation of ammonium persulphate, ii, 177.
- Salazar, G. G.**, variation with composition of the dielectric constant of mixtures of alcohols with water, ii, 725.
- Salisbury, H. M.** See *C. E. Davis*.
- Salkind.** See *Zalkind*.
- Salkowski, H., jun.**, β -lactones of β -hydroxybutyric acid and its alkyl derivatives and the influence of constitution on the decomposition of β -lactones, i, 366.
- Sallinger, H.** See *E. Ramann*.
- Saltmarsh, M. O.**, arc spectrum of phosphorus, ii, 436.
- Salvesen, H. A.**, *A. B. Hastings*, and *J. F. McIntosh*, blood changes and clinical symptoms following oral administration of phosphates, i, 896.
 effect of administration of calcium salts on the inorganic composition of the blood, i, 896.
- Salvesen, H. A.**, and *G. C. Linder*, inorganic bases and phosphates in relation to the protein of blood and other body fluids in Bright's disease and in heart failure, i, 442.
 relation between calcium and protein of serum in tetany due to parathyroidectomy, i, 443.
- Salzmänn, R.** See *A. Pictet*.
- Samec, M.**, *M. Minaev*, and *N. Bonžin*, plant colloids. XV. Amylopectins prepared from different starches, i, 923.
- Sameshima, J.**, theory of atmolysis, ii, 24.
- Sameshima, J.**, *K. Aihara*, and *T. Shirai*, attempted separation of the isotopes of chlorine by adsorption on charcoal, ii, 164.
- Sammartino, U.**, and *D. Liotta*, physiological action of insulin, i, 447.
- Samter, M.** See *H. Jungmann*.
- Samter, W.** See *B. Pfyl*.
- Sanada, T.** See *H. Kondo*.

- Sand, H. J. S., and E. J. Weeks**, the dependence of polarisation-overvoltage on hydroxyl and hydrogen-ion concentration. I. Polarisation-overvoltage of an antimony cathode in aqueous alkaline solution, ii, 152.
- Sander, E.** See *O. Nolte*.
- Sander, L.** See *P. Friedländer*.
- Sander, W., and K. L. Meissner**, range of the mixed crystal phase rich in aluminium in the quaternary system aluminium-magnesium-silicon-zinc, ii, 263.
- Sanders, J. P.** See *B. M. Hendrix*.
- Sandiford, K.** See *C. H. Greene*.
- Sando, C. E., and J. U. Lloyd**, isolation and identification of rutin from the flowers of elder (*Sambucus canadensis*, L.), i, 597.
- Sandoz, M.** See *F. Kehrmann*.
- Sandved, K.** See *O. Collenberg*.
- Sanfourche, A.**, relationship between some oxygen compounds of nitrogen, ii, 544.
- Sanfourche, A., and L. Gardent**, sodium hypochlorite [hydrates], ii, 856.
- Sanna, G.** See *B. Oddo*.
- Santesson, C. G.**, action of poisons on enzymic processes. IX. Action of poisons on metallic catalysts and catalase processes, i, 1148.
- Sanyol, P. E.**, determination of carbonic acid present as carbonate in soils, i, 820.
- Sapper, A.** See *H. Reihlen*.
- Sarasin, J., and E. Wegmann**, synthesis of heteroxanthine from an iminazole [glyoxaline] derivative, i, 1114.
quaternary salts of iminazoles [glyoxalines]. II., i, 1115.
- Sarre, K.** See *E. Speyer*.
- Sartori, A.**, poisoning by mercuric chloride and the limiting amount of mercuric chloride detectable by post-mortem tests, ii, 569.
- Sartory, A., and R. Sartory**, action of potassium and copper dichromates on the growth of *Phytophthora infestans*, i, 1016.
- Sartory, R.** See *A. Sartory*.
- Sasaki, N.**, state of equilibrium in mixed salt solutions, ii, 727.
kinetics of the ionic reaction between ferric and iodide ions, ii, 765.
- Saslowsky, J. J.**, density of liquids and temperature, ii, 452.
- Sato, A.** See *A. T. Shohl*.
- Sauerwald, F.**, internal friction of molten metals and alloys. I. Lead-bismuth alloys, ii, 553.
- Sauerwald, F.** [with *K. Knehan*], the hardness of mixed crystals of copper-nickel and iron-nickel alloys at temperatures up to the melting point, ii, 189.
- Sauerwald, F., H. Allendorf, and P. Landschütz**, high-temperature density measurements. V. Density and expansion of liquid and solid grey pig-iron, ii, 556.
- Sauerwald, F., W. Schultze, and G. Jackwirth**, metallographic heat etching, ii, 863.
- Saunders, F. A., and H. N. Russell**, regularities in the spectra of the alkaline earths, ii, 800.
- Saunders, S. W.**, calculation of gaseous equilibrium constants, ii, 836.
- Saunders, S. W.** See also *W. E. Garner*.
- Savoia, G.** See *I. Bellucci*.
- Sayers, R. R., H. R. O'Brien, G. W. Jones, and W. P. Yant**, collection and preservation of blood samples for determination of carbon monoxide, i, 582.
- Sawyer, R. A., and R. F. Paton**, vacuum spark spectrum of silicon, 2100-6700 Å, ii, 801.
- Sayers, R. R., and W. P. Yant**, elimination of carbon monoxide from blood by treatment with air, with oxygen, and with a mixture of carbon dioxide and oxygen, i, 582.
- Sborgi, U., E. Bovalini, and L. Cappel- lini**, double decomposition, $(\text{NH}_4)_2\text{B}_4\text{O}_7 + \text{Na}_2\text{SO}_4 \rightleftharpoons \text{Na}_2\text{B}_4\text{O}_7 + (\text{NH}_4)_2\text{SO}_4$, in aqueous solution. III., ii, 478.
- Sborgi, U., and E. Gagliardo**, reaction between boron nitride and various metallic oxides, ii, 472.
- Sborgi, U., and E. Gallichi**, double decomposition, $(\text{NH}_4)_2\text{B}_4\text{O}_7 + \text{Na}_2\text{SO}_4 \rightleftharpoons \text{Na}_2\text{B}_4\text{O}_7 + (\text{NH}_4)_2\text{SO}_4$, in aqueous solution. I. and II., ii, 477, 478.
- Sborgi, U., and L. Stefanini**, double decomposition, $(\text{NH}_4)_2\text{B}_4\text{O}_7 + \text{Na}_2\text{SO}_4 \rightleftharpoons \text{Na}_2\text{B}_4\text{O}_7 + (\text{NH}_4)_2\text{SO}_4$, in aqueous solution. IV., ii, 478.
- Scagliarini, G., and G. Tartarini**, complex thiocyanates of tervalent metals. III., i, 312.
- Scagliarini, G.** See also *R. Ciusa*.
- Scales, F. M., and A. P. Harrison**, colorimetric determination of nitrate nitrogen, ii, 565.
- Schaaf, F., and A. Labouchère**, synthesis of polyhydroxyphenylalanines, i, 514.

- Schaal.** See **Cäsar**.
- Schaarschmidt, A.**, explanation of the catalytic action in Friedel-Crafts' syntheses, i, 743.
- Schaarschmidt, A.**, and **K. Kasai**, photochemical behaviour of methyl-anthraquinones, i, 1327.
- Schaarschmidt, A.**, and **E. Smolla**, action of nitrogen tetroxide on aromatic hydrocarbons, particularly toluene, i, 380.
- Schacherl, F.**, effect of pressure on the refractive power of hydrogen, ii, 671.
- Schachnow, L.** See **O. Gerngross**.
- Schack, H.**, ternary system, copper-lead-antimony, ii, 260.
- Schacke, B.** See **W. Borsche**.
- Schaede, R.**, reaction of living protoplasm, i, 1018.
- Schäfer, L.** See **A. Hahn**.
- Schaefer, R.**, diffusion of arsenic [trioxide] in gelatin, i, 232.
- Schaefer, R.**, and **Franz Schmidt**, colloidal properties of phloridzin, i, 1151.
- Schärer, M.** See **H. Rupe**.
- Schärer, O.**, theory of the solubility relations of strong electrolytes, ii, 455.
- Schätti, A.**, the influence of various carbohydrates and amino-acids on the blood and urinary sugar of the healthy organism, i, 236.
- Schafmeister, P.** See **G. Tammann**.
- Schalek, E.**, and **A. Szegvari**, slow coagulation of concentrated ferric oxide sols to reversible jellies, ii, 115.
- Schall, C.**, and **W. Kirst**, cathodic reduction of ketones; menthone, i, 63.
- Schall, C.**, and **H. Markgraf**, electrolytic production of cobalt and nickel triacetates from the diacetates, and of nickel trichloride, ii, 342.
- Schapiro, M.** See **A. Rosenheim**.
- Schartow, L.** See **W. Strecker**.
- Schauder, H.** See **H. Biltz**.
- Schauer, T.**, sodium carbonate fusion for the detection of manganous and manganic ions, ii, 426.
- Schaum, K.** [with **H. Schneider**], the electro-chemical preparation of cyanuric acid and allophanic esters from formamide, i, 151.
- Schaum, K.**, **A. Moeller**, and **T. Marx**, process of filtration, ii, 311.
- Schaum, K.**, and **K. Rosenberger**, changes in state of aggregation and polymorphism. IV. Formation of metastable benzophenone, i, 1078.
- Schaum, K.**, and **K. Unger**, change of state of aggregation and polymorphism. III. Polymorphism of benzophenone, i, 520.
- Schay, G.**, quantum theory of monatomic ideal gases, ii, 722.
- Scheff, G.**, light absorption of the pigment formed in the orcinol reaction for pentoses, i, 942.
- spectrophotometric determination of pentoses, ii, 632.
- Scheffler, B.** See **A. Sonn**.
- Scheibe, G.**, **F. May**, and **H. Fischer**, attempted identification of absorption bands by quantitative measurements with molecular compounds. I., ii, 712.
- Scheibler, H.**, *N*-alkylamino-fatty acids and their *N*-acyl derivatives, i, 1050.
- Scheibler, H.**, and **F. Emden**, formation of $\alpha\beta$ -ketone-alcohols (acyloins) and $\alpha\beta$ -diketones by the action of alkali metals on aliphatic esters, i, 42.
- Scheibler, H.**, **F. Sotscheck**, and **H. Friesse**, tetrahydrofurfuraldehyde, i, 1218.
- Scheidegger, J.** See **P. A. Levene**.
- Schellenberg, A.** See **H. Tropsch**.
- Schelling, V.** See **C. Gränacher**.
- Scheminzky, F.**, inductor for conductivity determinations for use with continuous current, ii, 525.
- Schenck, M.**, bile acids. X. and XI., i, 179, 1318.
- Schenk, P.**, metabolism of the heart. I. Carbohydrate balance of the heart, i, 1131.
- metabolism of the heart. II. The phosphoric acid balance of the heart, i, 1132.
- metabolism of the heart. III. Carbohydrate and phosphoric acid balance of the heart after injury, i, 1132.
- Schenk, R.**, and **G. Römer**, phosphonitrilic chlorides and their transformations. I., ii, 752.
- Schepp, R.** See **C. G. Schwalbe**.
- Scheringa, K.**, determination of nitrate by the method of Grandval and Lajoux, ii, 699.
- Scherrer, P.** See **V. Kohlschütter**.
- Schertz, F. M.**, determination of carotene by means of the spectrophotometer and the colorimeter, ii, 359.
- Scheunemann, B.**, behaviour of quinoline in the animal organism, i, 123.
- Scheyer, H.** See **H. Fischer**.
- Schiele, H.** See **A. Windaus**.
- Schiller, H.**, electromotive characteristics of glasses, ii, 459.
- Schiller, N.** See **A. Fernbach**.
- Schilov, E.**, constitution of mercurous compounds, ii, 487.

- Schilt, M.** See *P. Wenger*.
Schimmel & Co., essential oils, i, 1088.
Schindler, M. H. See *C. Moureu*.
Schinn, E. See *R. Stoermer*.
Schinz, H. See *L. Ruzicka*.
Schkade, A. See *W. Steinkopf*.
Schlack, P. See *W. Küster*.
Schläger, F. See *K. Brand*.
Schläpfer, P., and *P. Debrunner*, specific heat of graphitic carbon and coke, ii, 231.
Schlee, H., concentration of silver ions in solutions of colloidal and complex silver preparations with special reference to their medicinal use, i, 1262.
Schleede, A. See *E. Tiede*.
Schleicher, A., the crystal-molecule; X-ray spectroscopy and constitution, ii, 517.
Schleifenbaum, W. See *E. Rosenhauer*.
Schleiper, R., laboratory gasometer, ii, 322.
Schlenk, W., and *T. Weichselfelder*, nickel hydride and the mechanism of hydrogenation using a nickel catalyst, ii, 189.
Schlesinger, H. I., and *H. B. Siems*, solubility product of barium manganate and the equilibrium between manganate and permanganate ions, ii, 862.
Schlesinger, H. I., and *M. W. Tapley*, preparation of the double fluorides of the metals of the platinum group and absorption spectra of the halogenoplatinates, ii, 343.
Schleussner, C. A., diffusion processes in gelatin. II. Liesegang's phenomenon, ii, 730.
Schlichting, O. See *H. Wieland*.
Schlosser, A. See *P. Karrer*.
Schlossmann, H., creatine content of frog's muscle during work. I, i, 1255.
Schlubach, H. H., and *K. Maurer*, preparation of β -methylglucoside, i, 1286.
Schlubach, H. H., and *H. Miedel*, ammonium as a reducing agent, i, 1295.
Schluttig, W. See *E. Müller*.
Schmalfuss, H., the acids and red colouring matter of the horned poppy (*Glaucium luteum*), i, 252.
 preparation of magnesium methyl chloride for the Grignard reaction, i, 1054.
 formation of pigment. I. Enzymic pigment formation as an aid to classification, i, 1263.
Schmalfuss, H., and *K. Keitel*, detection of acids in plants. II., i, 1155.
Schmalfuss, H., and *F. Werner*, formation of pigment. II., i, 1263.
Schmalz, K. See *H. Pringsheim*.
Schmick, H., theory of anomalous ionic mobilities, ii, 456.
Schmid, A., diffusion gas electrode, ii, 324.
Schmid, F., determination of carbamide by sodium hypobromite, ii, 430.
Schmidinger, K. See *A. Eibner*.
Schmidt, A., ethyl mercaptol of phenyl ethyl ketone; a new disulphone, i, 647.
Schmidt, Alfred. See *E. Rosenhauer*.
Schmidt, Arvid. See *W. M. Fischer*.
Schmidt, August. See *E. Benary*.
Schmidt, C. L. A., and *J. A. Merrill*, determination of bile acids in urine, ii, 359.
Schmidt, E. See *A. Sonn*.
Schmidt, E. G., *W. H. Peterson*, and *E. B. Fred*, formation of *l*-leucic acid in acetone-butyl alcohol fermentation, i, 1146.
Schmidt, E. G. See also *W. H. Peterson*.
Schmidt, E. K. O., *A.* Use of invertase. *B.* Repeated use of the same preparation of invertase, i, 1381.
Schmidt, F. See *L. Ambard*.
Schmidt, Ferdinand, absorption edges of phosphors, ii, 583.
Schmidt, Franz. See *R. Schaefer*.
Schmidt, G. C., ion migration in solid electrolytes, ii, 727.
Schmidt, G. C., and *F. Durau*, adsorption, ii, 238.
Schmidt, G. C., and *R. Walter*, electrical conductivity of vapours of salts, ii, 13.
Schmidt, Hans, aromatic compounds containing arsenic and antimony. I. Phenylenearsinicstibinic acids, i, 1003.
Schmidt, Horst. See *H. Pauly*.
Schmidt, I. See *N. Troensegaard*.
Schmidt, J., and *E. Äckerle*, phenanthrene series. XXXV. Transformations of chlorophenanthrenes, i, 529.
Schmidt, K. F., the imino-residue, i, 721.
Schmidt, K. O. See *W. Böttger*.
Schmidt, V. See *H. de Diesbach*.
Schmidt, W. See *H. Meyer*.
Schmidt-Nielsen, S., and *A. W. Owe*, determination of the iodine value [of fats and oils], ii, 210.

- Schmitz, H. L.**, and **A. S. Loevenhart**, study of two series of procaine derivatives with reference to the relationship between their pharmacological action and chemical constitution, i, 1378.
- local anæsthetic properties of *p*-aminobenzoyldiisopropylaminoethanol hydrochloride ("isocaine"), cocaine, procaine, and butyn, i, 1378.
- Schmitz, J.** See **J. Bredt**.
- Schmitz, K.** See **G. F. Hüttig**.
- Schmuck, A.**, chain-forming reactions of the amides of α -hydroxy-acids, i, 1050.
- Schnapp, P.**, chemical changes in the lipoids of kidneys with degenerated cells, i, 456.
- Schneider, A.** See **C. Dhéré**.
- Schneider, F.** See **E. Heuser**.
- Schneider, G.** See **W. Gluud**.
- Schneider, H.** See **K. Schanm**.
- Schneider, K.** See **A. Bömer**, and **R. Willstätter**.
- Schneider, M.** See **A. Zinke**.
- Schneider, W.** See **A. Skita**.
- Schneider, Wilhelm** [with **W. Doenhardt**, **O. Süsenguth**, **H. Nitzsche**, **A. Ross**, **A. Sack**, and **E. Leutheusser**], pyridine-arylimines. I., i, 1107.
- Schneider, Wilhelm, K. Gaertner**, and **A. Jordan**, reactions of *N*-alkyl-methylenedihydro-pyridines and -quinolines, i, 551.
- Schneider, Wilhelm**, and **Wilhelm Müller**, reaction of pyrylium compounds with phenylhydrazine, i, 1109.
- Schnell, B.** See **K. Ziegler**.
- Schneller, K.** See **H. Fischer**.
- Schnerb, I.** See **W. Meigen**.
- Schnupp, J.** See **H. Thoms**.
- Schober, W.**, changes in chlorine content of whole blood and blood-serum of infants in relation to gastric secretion, i, 1125.
- Schöbl, O.**, chemotherapeutic experiments with chaulmoogra and allied preparations, i, 690.
- chemotherapeutic experiments with chaulmoogra and allied preparations. II. Comparison of the antiseptic power of chaulmoogra oil with that of other vegetable and animal oils, i, 690.
- chemotherapeutic experiments with chaulmoogra and allied preparations. IV. Growth-inhibiting effect of organic compounds towards acid-fast bacilli. V. Mechanism of growth-inhibiting effect of chaulmoogra and other vegetable oils, i, 1386.
- Schöding, E.**, degradation of the ideal gaseous state and the [mean] free path, ii, 232.
- Schoeller, W.**, complex organic compounds of mercury, i, 1248.
- Schoeller, W. R.**, and **E. F. Waterhouse**, volumetric determination of niobium, ii, 427.
- Schoen, M.** See **A. Fernbach**, and **H. Plotz**.
- Schoen, R.**, and **G. Sliwka**, [physiological] action of acetylene. III. The gases of the blood of rabbits during the administration of acetylene, i, 123.
- Schönberg, A.**, preparation of diphenylene sulphide by the action of sodamide on diphenylsulphoxide, i, 39.
- [benzolic acid transformation], i, 1195.
- Schönberg, A.**, **R. Abelsdorff**, **H. Kirchrath**, **W. Malchow**, and **A. Rosenbach**, valency. I. Estimation of the strength of the bond between a radical and carbon, i, 520.
- Schönborn, H.**, electric conductivity and transition points of glasses, ii, 456.
- Schoenfeld, B.** See **A. Fodor**.
- Schönfelder, K.** See **W. Gluud**.
- Schönheimer, R.**, increased absorption of cholesterol in the presence of deoxycholic acid, i, 1140.
- Schoep, A.**, crystalline form of becquerelite and schoepite; their composition and the polymorphism of uranium hydroxide, $\text{UO}_3 \cdot 2\text{H}_2\text{O}$, ii, 560.
- sklodowskite, a new radioactive mineral, ii, 868.
- Schöpfer, H.** See **A. Zinke**.
- Schofield, F. H.**, iron-mercury calorimeter, ii, 323.
- Scholl, R.**, and **P. Dahll**, action of potassium ferricyanide on purpurin in alkaline solution, i, 406.
- Scholl, R.**, **P. Dahll**, and **F. Hansgirt** [with **P. Hasenclever** and **F. Fleischmann**], the action of potassium ferricyanide on quinzarin in alkaline solution, i, 178.
- Scholl, R.**, and **C. Tänzer**, *amphipyranthrone* and its relation to pyranthrone, i, 60.
- Schoorl, N.**, viscosity and refractive researches on the coagulation of lyophilic colloids, ii, 310.
- Schoorl, N.** See also **A. Regenbogen**.
- Schorigin, P.**, decomposition of ethers by metallic sodium. II. Relative tenacity of different radicals to the oxygen atom, i, 1185.
- transformation of benzyl ethers into carbinols. I., i, 1188.

- Schott, G.**, and **G. Linck**, hydration of natural and artificial glasses, ii, 238.
- Schott, G. A.**, scattering of X-rays by hydrogen, ii, 286.
- Schott, W.** See **E. Heuser**.
- Schotte, H.** See **M. Bergmann**.
- Schottky, H.**, hardness of iron-nickel alloys, ii, 490.
- Schov, S. A.**, preparation of potassium antimonate, ii, 547.
- Schramm, W.** See **J. Meyer**.
- Schrauth, W.**, and **K. Quasebarth**, condensation of cyclohexenes with phenol; (chemical structure of lignin), i, 724.
- Schrauth, W.**, and **W. Wege**, cyclohexyl ether, i, 725.
- Schreiber, G.** See **T. Posner**.
- Schreinemakers, F. A. H.**, non-, uni-, and multi-variant equilibria. XXIV., XXV. and XXVI., ii, 389, 601.
- Schreiner, E.**, solubility and partition measurements of picric acid in solutions of salts, i, 1303.
- hydration of univalent ions, ii, 524.
- degree of dissociation of acids in alcohol, ii, 657.
- deduction of the relation between the osmotic coefficient and the activity coefficient, ii, 657.
- Schreiner, E.**, and **K. Seljesaeter**, temperature coefficients of the *E.M.F.* of silver-cadmium and copper-cadmium alloys, ii, 760.
- Schreiner, O.**, toxic organic soil constituents and the influence of oxidation, i, 1024.
- Schreiterer, H.** See **A. Windaus**.
- Schröder, W.** See **A. Benrath**.
- Schubert, E.**, rhythmic crystallisation, ii, 834.
- Schubert, M.** See **H. Fischer**.
- Schuberth, L.** See **F. Reindel**.
- Schubnikov, L.** See **I. Obreimov**.
- Schübel, K.**, chemistry and pharmacology of kawa-kawa (*Piper methysticum*), i, 1140.
- Schürmann, G.** See **K. Fries**.
- Schütz, F.**, remarks on F. Fischer's paper, "The relation between low-temperature tar, coke-oven tar, and petroleum," i, 628.
- Schütz, F.**, **W. Buschmann**, and **H. Wissebach**, composition of low-temperature tar. IV., i, 481.
- low-temperature tar obtained from the Zeche Fürst Hardenberg coal and, in particular, the content of benzene, phenol, and acetone, i, 627.
- Schütz, L.** See **W. Schulemann**.
- Schützeller, H.** See **R. Fricke**.
- Schuhmann, R.**, free energy of antimony trioxide and the reduction potential of antimony, ii, 152.
- activity of perchloric acid in aqueous solution, ii, 152.
- free energy and heat content of arsenic trioxide and the reduction potential of arsenic, ii, 744.
- Schulemann, W.**, **L. Schütz**, and **K. Meisenburg**, [*p*-aminobenzoic] esters of substituted aminopropyl alcohol, i, 640.
- Schultz, F.** See **W. Wislicenus**.
- Schultz, J. A.** See **C. H. Hunt**.
- Schultze, H.** See **F. Krollpfeiffer**.
- Schultze, W.** See **F. Sauerwald**.
- Schulz, E. R.** See **K. P. Link**, and **W. E. Tottingham**.
- Schulz, F.**, and **J. Hamackova**, cellulose in coal, i, 618.
- Schulze, E. L.** See **H. S. Fry**.
- Schumacher, E. E.**, crack development in glass, ii, 655.
- Schumacher, E. E.**, and **F. F. Lucas**, photomicrographic evidence of the crystal structure of pure cerium, ii, 650.
- Schumm, O.**, formation of porphyrin from blood pigment. I. Spectroscopic properties of porphyrin esters, i, 441.
- hæmatoporphyria congenita. IV. The identification of natural porphyrins in serous fluids and in organs, i, 460.
- porphyrin formation. I., i, 688.
- correction of "natural porphyrins." III., i, 689.
- spectroscopic chemical reactions of some porphyrins and their methyl esters, i, 893.
- Schumm, O.**, and **A. Papendieck**, fat and protein absorption after comprehensive resection of the intestine, i, 114.
- formation of porphyrin from the colouring matter of blood, i, 894.
- Schumm, P.** See **H. Wienhaus**.
- Schummer, O.** See **F. Feigl**.
- Schutte, H. S.** See **A. K. Anderson**.
- Schuyler, W. H.** See **G. Edgar**.
- Schwab, E.** See **E. Abderhalden**.
- Schwalbe, C. G.**, adsorption of aluminium hydroxide from aluminium sulphate solutions by cotton and wood cellulose, i, 500.
- Schwalbe, C. G.**, and **R. Schepp**, conversion of ligneous plant substances into coal. I. Production of coal-like products from cellulose, i, 377.

- Schwalbe, C. G.**, and **R. Schepp**, conversion of ligneous plant substances into coal. II. Chemical composition and properties of coal-like substances from cellulose, i, 715.
- Schwantke, A.**, new minerals, ii, 693.
- Schwarte, C.** See **H. Ley**.
- Schwartz, H. A.**, **H. R. Payne**, and **A. F. Gorton**, effect of silicon on the equilibrium diagram of the iron-carbon system in the vicinity of the eutectic point, ii, 265.
- Schwartzkopff, O.**, graphical determinations of chemical equilibria, ii, 837.
- Schwartzkopff, O.** See also **F. Hein**.
- Schwarz, C.**, and **E. Buchman**, physiology of digestion. X. The effect of cristallose, saccharin, and parasaccharin on salivary diastase, i, 443.
- Schwarz, C.**, and **K. Steinmetzer**, physiology of digestion. I. The diastatic power of the mixed saliva of man, the horse, ox, pig, and dog, with observations on the complex nature of salivary diastase. II. Fluctuations in the diastatic power of mixed saliva, i, 443.
- Schwarz, C.**, and **H. Teller**, physiology of digestion. VIII. Digestion in the crop of the fowl, i, 444.
- Schwarz, C.**, and **V. Zellinger**, physiology of digestion. XI. The effect of cristallose, saccharin, and parasaccharin on peptic and tryptic digestion, i, 443.
- Schwarz, R.**, **R. Eden**, and **E. Herrmann**, factors influencing chemical processes of fracture healing, i, 1260.
- Schwarz, Robert**, sol of silicic acid, and its preparation, ii, 334.
- Schwarz, Robert**, and **P. Gross**, photochemical decomposition of silver chloride, ii, 550.
- Schwarz, Robert**, and **E. Menner**, silicic acids. I., ii, 753.
- Schwarz, Robert**, and **F. Stöwener**, ageing phenomena in silica gels, ii, 547.
- Schwarzl, D.** See **H. Lieb**.
- Schweigart, H.** See **H. Haehn**.
- Schweizer, C.**, and **H. Geilinger**, Cannizzaro's reaction in the mechanism of alcoholic fermentation, i, 1383.
- Schwenck, J. R.** See **G. S. Parks**.
- Schwieger, A.** See **A. Windaus**.
- Schwoch, G.** See **E. Benary**.
- Scott, A. W.** See **L. W. Jones**.
- Scott, D. A.** See **C. H. Best**.
- Scott, D. H.**, determination of the vapour pressures of caesium and rubidium, and a calculation of their chemical constants, ii, 144.
- Scott, J. M. D.**, part played by iron and fat in the recovery of rats from chronic experimental anæmia, i, 789.
- Scott, W. D.** See **E. J. Bowen**.
- Scott, W. W.**, volumetric determination of fluorine, ii, 625.
- diphenylamine indicator in the volumetric determination of iron, ii, 787.
- Scottish Dyes, Ltd.** See **H. A. E. Drescher**.
- Scremin, L.**, minimal lethal doses of lead salts intravenously injected, i, 910.
- Seaborne, F. S.** See **E. G. R. Ardagh**.
- Sebrell, L. B.**, and **C. E. Boord**, the preparation and properties of 1-thiobenzthiazole, its homologues and derivatives, i, 89.
- Sedlatscheck, K.** See **H. Biltz**.
- Seeger, W.** See **K. Brunner**.
- Seekles, L.**, phthalaldehyde. II., i, 280.
- phthalaldehydic acid, i, 642.
- Seel, K.**, rapid electrolytic determination of bismuth and its use in the analysis of bismuth ores and products, ii, 705.
- Seeliger, R.**, and **M. Wendt**, excitation of the hydrogen spectrum by electronic impact, ii, 443.
- Šefčík, J. A.** See **W. Laufberger**.
- Séguin, P.** See **A. Berthelot**.
- Segur, J. B.** See **J. B. Conant**.
- Seibt, S.** See **H. Staudinger**.
- Seide, O.**, 2-amino-4-methylpyridine and certain derivatives, i, 767.
- Seidel, F.** See **C. Bülow**.
- Seidell, A.**, preparation of a crystalline picrate having the antineuritic properties of vitamin-B, i, 901.
- Seidell, A.** See also **G. Bertrand**.
- Seidenberg, S.** See **P. Rona**.
- Seifriz, W.**, phase reversal in emulsions and protoplasm, i, 127.
- Seijoo, M.**, rate of oxidation of aldehydes, i, 834.
- Seitz, A.** See **C. A. Rojahn**.
- Seitz, F.** See **R. Willstätter**.
- Seka, R.**, carbazole derivatives. I., i, 1234.
- Selivanov, A.** See **S. Nametkin**.
- Seljesaeter, K.** See **E. Schreiner**.
- Semenov, N.** See **V. Kondratsev**.
- Semenovitsch, B.** See **V. Gulevitsch**.
- Seminoff, N.** See **J. Chariton**.
- Semler, A.**, general colloid chemistry. X. Chemical behaviour and colour of the ionogen complexes of arsenic trisulphide sols, ii, 532.
- Semler, A.** See also **W. Pauli**.
- Semmelbauer, E.** See **A. Eibner**.

- Semon, W. L.**, and **V. R. Damerell**, sodium hydroxylaminesulphonate as a reagent for the preparation of oximes, i, 709.
- Semon, W. L.** See also **G. McP. Smith**.
- Sen, H. K.**, the decarboxylation of dimethylpyruvic acid and its preparation, i, 136.
- Sen, K. C.**, stability of colloidal solutions. I. Aluminium hydroxide suspension, ii, 830.
- Sen, K. C.**, and **N. R. Dhar**, behaviour of silver chromate in gelatin and a new explanation of Liesegang's rings, ii, 730.
- adsorption. VII. Coagulation of negatively charged chromium hydroxide and the influence of ions carrying the same charge as the colloid, ii, 733.
- Sen, K. C.**, **P. B. Ganguly**, and **N. R. Dhar**, adsorption. V., ii, 394.
- Sen, K. C.** See also **N. R. Dhar**.
- Sen, R. N.**, and **B. Sett**, studies in dyes with multiple chromophores, i, 336.
- Sen, R. N.**, and **N. N. Sinha**, condensations of aldehydes with resorcinol and some other aromatic hydroxy-compounds, i, 288.
- Senderens, J. B.**, catalytic dehydration of hydroaromatic alcohols, i, 40.
- catalytic preparation of benzyl ethers, i, 638.
- catalytic dehydration of alcohol and ether by alumina, i, 1280.
- Sendroy, J., jun.** See **A. B. Hastings**, and **D. D. Van Slyke**.
- Senfteleben, H. A.**, foundations of the quantum theory. I., ii, 281.
- Serio, F.**, the distribution of nitrogen in the urine of young dogs and its dependence on diet, i, 243.
- Serono, C.**, and **A. Cruto**, amylolytic and glycolytic enzymes of the pancreas and the salivary glands, i, 470.
- Serono, C.**, **E. Trocello**, and **A. Cruto**, preparation of insulin and its physiological action, i, 1150.
- Serowy**, marine salt deposits; polytherms of the four-salt points in the potassium chloride region of quinary systems, ii, 855.
- Servigne**. See **L. Gay**.
- Sett, B.** See **R. N. Sen**.
- Seufert, G.** See **O. Fischer**.
- Seuffert, R. W.**, possibility of influencing decomposition of albumin in the body by feeding individual amino-acids, i, 586.
- Severac, M.** See **G. W. Raiziss**.
- Sewell, M. C.**, relation of the molecular proportions in the nutrient solution to the growth of wheat, i, 1393.
- Seyderhelm, R.**, and **E. Homann**, narcotic leucocytosis; experimental researches on guinea-pigs, i, 1377.
- Seyer, W. F.**, receiving apparatus for fractional distillation at low pressures, ii, 670.
- Shaffer, P. A.**, and **T. E. Friedemann**, antiketogenesis. V. Ketolytic reaction; action of glycollaldehyde and of glyoxal, i, 1369.
- Shaffer, P. A.**, and **E. Ronzoni**, ether anaesthesia. I. The estimation of ethyl ether in air and in blood, and its distribution ratio between blood and air, ii, 69.
- Shaffer, P. A.** See also **M. Somogyi**.
- Shannon, E. V.**, chalcophyllite from Chile, ii, 120.
- benjaminite, a new sulphosalt mineral, ii, 560.
- Shapiro, C. V.** See **W. R. Orndorff**.
- Sharma, R. K.** See **N. K. Sur**.
- Sharp, P. F.**, extension of the Van Slyke table of factors for the conversion of nitrogen gas into mg. of amino-nitrogen, ii, 626.
- Sharp, T. M.** See **T. A. Henry**.
- Sharpe, J. S.**, choline as a precursor of guanidine; decrease in the amount of choline of the hen's egg during incubation, i, 586.
- Shaw, B. D.**, fission of the pyridine nucleus during reduction, i, 1343.
- Shaw, B. H.**, production of formaldehyde by intestinal bacteria, i, 916.
- Shaw, C. P.** See **L. T. Fairhall**.
- Shaw, E. B.** See **F. B. Talbot**.
- Shaw, W. M.** See **W. H. MacIntire**.
- Shedd, O. M.**, determination of nitrate and ammonia in nitrogenous materials, i, 1394.
- Shenstone, A. G.**, low-voltage arc spectra of copper and silver, ii, 709.
- Shepherd, M.**, and **F. Porter**, an improved method for the separation of gas mixtures, ii, 68.
- Sheppard, S. E.**, and **A. P. H. Trivelli**, influence of crystal habit on photochemical decomposition in silver bromide crystals, ii, 481.
- Sheppard, S. E.** See also **E. P. Wightman**.
- Sherman, H. C.**, and **H. Edgeworth**, experiments with two methods for the study of vitamin-B, i, 345.
- Sherman, H. C.**, and **N. R. Grose**, a quantitative study of the destruction of vitamin-B by heat, i, 346.

- Sherman, H. C.**, and **M. M. Kramer**, experiments upon vitamin-*A*, i, 788.
- Sherman, H. C.**, and **A. Spohn**, a critical investigation and an application of the rat-growth method for the study of vitamin-*B*, i, 346.
- Sherman, H. C.**, **A. W. Thomas**, and **M. L. Caldwell**, isoelectric point of malt amylase, i, 1142.
- Sherwin, C. P.** See **L. R. Cerecedo**, **J. A. Muldoon**, and **G. J. Shipley**.
- Shibata, B.** See **Y. Asahina**.
- Shibue, C.** See **M. Nakao**.
- Shigematsu, T.** See **R. Majima**.
- Shikata, M.**, concentration cells and the electrolysis of sodium ethoxide solutions, ii, 597.
- Shima, G.** See **Y. Osaka**.
- Shimada, M.** See **T. Kariyone**.
- Shimamura, T.** See **R. H. A. Plimmer**.
- Shinozaki, H.** See **R. Hara**.
- Shipley, G. J.**, **J. A. Muldoon**, and **C. P. Sherwin**, formation of ethereal sulphates, i, 899.
- Shipley, G. J.** See also **J. A. Muldoon**.
- Shipley, P. G.**, **E. M. Kinney**, and **E. V. McCollum**, experimental rickets. XXIV. Effect of certain extracts of plant tissues on florid rickets, i, 685.
- experimental rickets. XXV. Antirachitic effect of certain oils, i, 685.
- Shirai, T.** See **J. Sameshima**.
- Shires, G. A.**, electrometric titration; its methods and application to certain metallurgical analyses, ii, 197.
- Shivonen, V. J.**, ultra-red natural frequencies of salts containing sulphur, ii, 79.
- Shoemaker, H. A.** See **E. V. Lynn**.
- Shoemith, J. B.**, and **J. Haldane**, preparation of 2:4:2':4'-tetrahydroxybenzophenone, i, 292.
- Shoemith, J. B.**, **A. C. Hetherington**, and **R. H. Slater**, polarity effects in aromatic halogen compounds, i, 842.
- Shohl, A. T.**, estimation of the alkali retention in growth, i, 116.
- analysis of the Jerusalem artichoke, i, 128.
- Shohl, A. T.**, and **A. Sato**, acid-base metabolism. I. Determination of base balance, i, 451.
- acid-base metabolism. II. Mineral metabolism, i, 451.
- Shohl, A. T.** See also **F. L. Babbott, jun.**, and **I. N. Kugelmass**.
- Shonle, H. A.**, and **J. H. Waldo**, chemical reactions of the substance containing insulin, i, 448.
- Shostrom, O. E.** See **C. R. Fellers**.
- Shoulejkin, W.**, scattering of light by very large colloidal particles, ii, 644.
- Shriner, R. L.**, and **R. Adams**, preparation of palladous oxide and its use as a catalyst in the reduction of organic compounds. VI., ii, 668.
- Shrivastava, D. L.** See **S. S. Bhatnagar**.
- Shrum, G. M.**, doublet separation of the Balmer lines, ii, 282.
- Shrum, G. M.** See also **J. C. McLennan**.
- Sibassié, R.** See **H. Hérisssey**.
- Sickel, H.** See **E. Abderhalden**.
- Sidgwick, N. V.**, the Bohr atom and covalency, ii, 34.
- Sidgwick, N. V.**, and **R. K. Callow**, solubility of the aminophenols, i, 506.
- abnormal benzene derivatives, i, 506.
- Sieburg, E.**, and **W. Patzschke**, menstruation and the choline balance, i, 689.
- Siecke, W.** See **A. Stock**.
- Siedschlag, E.**, chromium-copper-nickel alloys, ii, 190.
- chromium-molybdenum and chromium-molybdenum-copper alloys, ii, 190.
- Sieg, H.** See **A. Sonn**.
- Sieg, L. P.**, direct determination of the principal reflecting powers of isolated tellurium crystals, ii, 849.
- Sieg, L. P.**, and **G. D. van Dyke**, principal optical constants of isolated tellurium crystals, ii, 849.
- Siegbahn, H. M.**, röntgenographic-chemical investigations, ii, 581.
- Siegert, M.** See **H. Lüers**.
- Siegert, P.** See **W. Madelung**.
- Sieglitz, A.**, fluorene series. VIII. Synthesis of fluorenone-1-carboxylic acid, i, 400.
- Siems, H. B.** See **H. I. Schlesinger**.
- Sieverts, A.**, and **A. Fritzsche**, potassium carbonate solution and carbon dioxide. I. and II., ii, 476.
- Sieverts, A.**, and **G. Müller-Goldegg**, cerium, mixed cerium metals, and hydrogen, ii, 185.
- Sigmund, W.**, action of metabolic end-products on plants. III. Action of nitrogen-free end-products of plant metabolism (etheral oils, terpenes, etc.) on the germination of seeds, i, 925.
- Sigrist, J.**, **P. Winkler**, and **M. Wantz**, preparation of chromium by electrolysis, ii, 864.
- Silberstein, J.** See **R. Lorenz**.
- Silsbee, C. G.** See **R. F. Jackson**.
- Sim, S. A.** See **T. H. Reade**.

- Simánek, A.** See *J. Bečka*.
- Simeon, F.**, and *E. S. Dreblow*, spectrum observations on the copper arc, ii, 802.
- Simms, H. S.**, water-jacketed hydrogen electrode, ii, 14.
- Simms, H. S.** See also *P. A. Levene*.
- Simon, F.**, chemical constant of mercury, ii, 112.
the atomic electrical conductivity of metals, ii, 445.
- Simon, F.**, and *C. von Simson*, crystal structure of hydrogen chloride, ii, 229.
crystal structure of argon, ii, 588.
- Simon, L. J.**, silver-sulphochromic oxidation of coal, i, 481.
viscosity of binary mixtures of sulphuric acid, potassium and sodium hydroxides, ii, 335.
viscosity of aqueous mixtures of chromic anhydride and alkalis; viscosity of chromates and sulphates in relation to isomorphism, ii, 455.
oxidation of acetic acid by various metallic chromates compared with oxidation by silver dichromate in the determination of carbon by the silver sulphochromic method, ii, 567.
- Simon, L. J.**, and *E. Aubel*, detection of pyruvic acid in muscle and liver, i, 450.
absence of pyruvic acid in blood, liver, and muscle, i, 1010.
- Simon, L. J.**, and *M. Frèrejacque*, action of bromine on methyl esters of phenolsulphonic acids; determination of sulphur in phenolsulphonic esters and salts, i, 636.
methylation of tertiary amines and alkaloids by means of methyl sulphonic esters derived from phenols, i, 665.
- Simon, L. J.**, and *L. Piaux*, characterisation and determination of small quantities of pyruvic acid, ii, 632.
spontaneous oxidation of lactic esters and alanine in presence and in absence of catalysts, i, 1034.
- Simon, W.**, action of different substances, particularly the so-called heart remedies, on disturbances of the rhythm of the heart, i, 461.
- Simonet, R.** See *A. Boutaric*.
- Simonnet, H.** See *H. Pénaud*.
- Simons, J.**, preparation of fluorine, ii, 847.
preparation, freezing point, and vapour pressure of hydrogen fluoride, ii, 848.
- Simons, J.**, and *J. H. Hildebrand*, potential of the fluorine electrode, ii, 828.
density and molecular complexity of gaseous hydrogen fluoride, ii, 848.
- Simons, J.** See also *J. H. Hildebrand*.
- Simonsen, J. L.**, 1:2:8-trimethoxy-6-methylantraquinone and 1:2:8-trimethoxy-7-methylantraquinone, i, 528.
- Simonsen, J. L.** See also *R. M. Parker*, and *M. G. Rau*.
- Simpson, S. G.**, mixed indicator for carbonate and hydrogen carbonate titrations, ii, 627.
- Simon, C. von.**, X-ray spectra of amalgams, ii, 449.
- Simon, C. von.** See also *F. Simon*.
- Sindlinger, F.** See *F. Mach*.
- Singer, R.** See *K. Hess*.
- Singh, B. K.**, and *A. C. Biswas*, dependence of optical rotatory power on chemical constitution. V. Rotatory dispersions of *d*-camphorimide, *d*-camphorbenzylimide, benzyl-*d*-camphoric acid, and their derivatives, i, 1211.
- Sinha, N. N.** See *R. N. Sen*.
- Sircar, A. C.**, and *S. K. Guha*, dyes derived from acenaphthenequinone, i, 428.
- Sircar, A. C.**, and *D. C. Roy*, dyes derived from phenanthraquinone. IV. Anilino-flavindulines and phenanthraquinoneazo-dyes, i, 566.
- Sirovich, G.**, polymorphic transformation of iron at 370° and the possibility of dissolution of cementite in α_1 -iron, ii, 49.
- Sjöberg, K.**, an amylase preparation with limited powers of hydrolysis, i, 106.
amylase in plants. III., i, 128.
products of the enzymic fission of starch, i, 1169.
- Sjöberg, K.**, and *E. Eriksson*, amylase, i, 1264.
- Sjöberg, K.** See also *R. Willstätter*.
- Sjollema, B.**, and *H. Gieteling*, modification of the Bell-Doisy-Briggs method for colorimetric determination of phosphoric acid, ii, 58.
- Sjollema, B.**, and *J. E. van der Zande*, metabolism of milk cows suffering from acetonæmia, i, 586.
- Skinner, G. S.**, deamination. III. Evidence of the existence of aliphatic diazonium salts from the formation of chloro-oximino-compounds, i, 626.
- Skinner, G. S.** See also *A. L. Barker*.

- Skinner, H. W. B.** See *C. D. Ellis*.
- Skita, A.** [with *L. Winterhalter*, and *W. Schneider*], the stereochemistry of the tri-substituted cyclohexanes, i, 25.
- Skobelzyn, D.**, secondary radiation from γ -rays, ii, 582.
- Skrabal, A.**, ageing of volumetric thio-sulphate solutions, ii, 565.
- Skrabal, A.** [with *R. Rieder*], Landolt's reaction: its acceleration by bromide and chloride, ii, 543.
- Skrabal, A.**, and *H. Airoldi*, velocity of hydrolysis of ethyl ether, ii, 842.
- Skrabal, A.**, and *M. Baltadschiewa*, velocity of hydrolysis of ethyl ortho-acetate, ii, 842.
- Skrabal, A.**, *E. Brunner*, and *H. Airoldi*, velocity of hydrolysis of mixed acetals, ii, 666.
- Skrabal, A.**, and *K. H. Mirtl*, velocity of hydrolysis of acetals and ketals, ii, 667.
- Skraup, S.**, and *F. Nieten*, superheating of uniform organic compounds. I. Arylparaffins and aliphatic esters, i, 1185.
- Slater, J. C.**, compressibility of the alkali halides, ii, 383.
- Slater, J. C.** See also *N. Bohr*.
- Slater, R. H.** See *J. B. Shoesmith*.
- Slater, W. K.**, heat of combustion of glycogen in relation to muscular contraction, i, 240.
redetermination of the heat of combustion of glycogen with special reference to its physiological importance, i, 1047.
- Slattery, M. K.**, crystal structure of "metallic" selenium and tellurium, ii, 849.
crystalline structure of barium and strontium selenides, ii, 859.
- Slawiński, K.**, abnormal phenomena in the terpene group in the light of an extension of Thiele's hypothesis, i, 865.
formulae of dicyclic terpenes, i, 1327.
- Sliwka, G.** See *R. Schoen*.
- Sloan, A. W.** See *R. Adams*, and *J. B. Conant*.
- Slocum, E. M.** See *M. T. Bogert*.
- Slooten, J. van.** See *P. Karrer*.
- Slosse, A.**, chemical effects of γ -rays of radium, i, 497.
chemical effect of the emanations of radioactive metals, ii, 748.
- Slosse, A.** See also *R. Reding*.
- Slothower, G. A.** See *P. Masucci*.
- Sluiter, E.**, decomposition of sugar in the lungs, i, 1370.
- Slyke, D. D. Van** [with *J. Sendroy, jun.*], determination of chlorides in blood and tissues, ii, 271.
- Slyke, D. D. Van**, and *J. M. Neill*, determination of gases in blood and other solutions by vacuum extraction and manometric measurement. I, ii, 872.
- Slyke, D. D. Van.** See also *C. R. Harington*, *A. B. Hastings*, and *G. C. Linder*.
- Smekal, A.**, quantum theory of radioactive disintegration, ii, 717.
- Smellie, P.**, the vapour pressure of arsenious oxide, ii, 40.
- Smeykal, K.** See *H. Fischer*.
- Smiles, S.**, and *D. T. Gibson*, the constitution of the disulphoxides. I, i, 275.
- Smiles, S.** See also *L. R. Hart*.
- Smirnov, A. J.**, and *S. P. Alissova*, rôle of the mineral constituents in plants. I. Influence of neutral salts on catalase, i, 1265.
- Smirnov, A. P.** See *P. Karrer*.
- Smit, N.** See *I. M. Koltchoff*.
- Smith, A. W.**, *E. D. Campbell*, and *W. L. Fink*, effect of changes in total carbon and in the condition of carbides on the magnetic properties of steel, ii, 293.
- Smith, C. R.**, dipyrityls from pyridine, i, 558.
- Smith, C. S.**, and *A. L. Brown*, determination of total phosphorus in blood, ii, 566.
- Smith, D. F.**, and *J. E. Mayer*, free energy of aqueous sulphuric acid, ii, 153.
- Smith, D. F.**, and *N. W. Taylor*, simple pressure-measuring device for use with corrosive gases, ii, 748.
- Smith, D. F.**, and *H. K. Woods*, free energy and heat of formation of lead monoxide, ii, 18.
- Smith, D. P.** See *V. Lenher*.
- Smith, E. P.**, effect of general anaesthetics on the respiration of cereals. I. Carbon dioxide production, i, 809.
- Smith, E. R.**, and *D. A. MacInnes*, moving boundary method for determining transference numbers, ii, 727.
- Smith, F. E.** See *C. S. Marvel*.
- Smith, F. J.** See *D. R. Boyd*.
- Smith, G. B. L.**, and *E. Wilcoxon* [with *A. W. Browne*, and *C. W. Mason*], azido-dithiocarbonic acid. I. Formation, preparation, and properties, ii, 42.
- Smith, G. B. L.** See also *A. W. Browne*.

- Smith, G. F.**, use of bromate in volumetric analysis. IV. Preparation and properties of normal and basic mercuric bromate, ii, 614.
- Smith, G. F., M. Brown, and J. F. Ross**, magnesium perchlorate trihydrate as a drying agent for steel and organic combustion analysis, ii, 198.
- Smith, G. McP., and W. L. Semon**, mechanism of the precipitation of metals by hydrogen sulphide; sulphur complexes of mercury, ii, 762.
- Smith, H. G., P. G. Carter, and J. Read**, phellandrenes. II., i, 658.
- Smith, H. G.** See also **R. T. Baker**, and **J. Read**.
- Smith, I. A.** See **A. McKenzie**.
- Smith, J. D. M.** See **G. T. Morgan**.
- Smith, K. K., and L. I. Bockstahler**, method of measuring specific heats of metals at high temperatures, ii, 821.
- Smith, R. B., and P. M. Giesy**, titration of ferric chloride with sodium hydroxide, using the oxygen electrode, ii, 557.
- Smith, S. B.** See **H. W. Foote**.
- Smith, W.** See **H. B. Hutchinson**, and **L. B. Winter**.
- Smits, A.**, complexity of the solid state, ii, 453.
electromotive equilibrium and polarisation, ii, 599.
influence of intensive drying on inner equilibria, ii, 655.
transformations of elements, ii, 847.
- Smoleński, K.**, preparation of methylglycuronide by the oxidation of methylglucoside, i, 10.
- Smoleński, K.** [with (*Mme.*) **A. Komornicka**, and **W. Stypinski**], researches on pectins, i, 16.
- Smolik, L.**, influence of electrolytes on the total surface of soil particles, i, 1276.
- Smolla, E.** See **A. Schaarschmidt**.
- Smorodincev, I. A.**, Engeland and Biehler's article "Some compounds extracted from human skeletal muscle," i, 456.
- Smorodincev, I. A., and A. N. Adowa**, alteration of the constituents of preserved flesh, i, 687.
- Smorodincev, I. A., and N. P. Riabouschinsky**, action of arsenic and antimony compounds on the fermentative functions of the organism. II. Action of certain arsenic and antimony preparations on pepsin, i, 472.
- Smyth, C. P.**, electric moments of organic molecules, ii, 810.
- Smyth, H. D.**, ionisation: hydrogen and oxygen, ii, 85.
different types of ions in hydrogen, ii, 585.
- Snapper, I.**, hippuric acid metabolism in man, i, 1010.
- Snapper, I., and A. Grünbaum**, hippuric acid balance in renal diseases, i, 902.
 β -oxidation in the kidneys, i, 1141.
- Snapper, I., A. Grünbaum, and J. Neuberg**, synthesis of hippuric acid in the surviving kidney of various animals and of man, i, 586.
- Snapper, I., and E. Laqueur**, determination of hippuric acid in urine, ii, 430.
- Snell, F. D.** See **M. T. Bogert**.
- Soames, K. M.** See **R. Robison**.
- Sobotka, H.**, dried yeast, i, 802.
- Sobotka, H.** See also **R. Kuhn**, and **R. Willstätter**.
- Sobti, B. R.** See **N. A. Yajnik**.
- Société Anonyme anc. Durand Huguenin & Cie**, preparation of highly chlorinated hydroaromatic products containing nitrogen, i, 35.
- Société Anonyme des Matières Colorantes et Produits Chimiques de St. Denis, A. Wahl, and R. Lantz**, naphthaquinone derivatives, i, 1210.
- Société Chimique des Usines du Rhône**, preparation of diethylchloroacetamide, i, 623.
- Society of Chemical Industry in Basle**,
basic derivatives of *p*-aminophenyl ethyl ether, i, 160.
derivatives of α -naphthol-2-carboxylic acid, i, 173.
 α -naphthol-4-carboxylanilide, i, 173.
preparation of aryl hydroxynaphthyl ketones, i, 174.
2:3-diaminoanthraquinone, i, 185.
preparation of menthyl diethylaminoethylcarbamate, i, 194.
amino-alcohols of the quinoline series, i, 206.
diallylxanthine, i, 217.
1:3:7-triallylxanthine, i, 217.
preparation of [azo] dyestuffs derived from pyrazolone and of intermediate products therefrom, i, 672.
 α -naphthol-4-carboxyarylamides, i, 1069.
aryl 4-hydroxynaphthyl ketones, i, 1079.
an aryl hydroxynaphthyl ketone, i, 1079.
- Socolow, A. P.**, internal state of the earth in relation to its radioactivity, ii, 718.
- Soddy, F.**, reported transmutation of mercury into gold, ii, 684.

- Soddy, F.**, and **A. F. R. Hitchins**, relation between uranium and radium. VIII. The period of ionium and the ionium-thorium ratio in Colorado carnotite and Joachimsthal pitchblende, ii, 446.
- Söderling, B.** See **H. von Euler**.
- Söderquist, R.**, preparation of aromatic α -ketonic acids, i, 207.
- Sörensen, S. P. L.**, and **K. Linderström-Lang**, determination and value of π_0 in electrometric measurements of hydrogen-ion concentrations, ii, 696.
- Soffner, M.** See **E. Fromm**.
- Sohnen, N. L.**, and **C. Coolhaas**, fermentation of galactose by *Saccharomyces cerevisiae*, i, 1014.
- Soika, R.** See **F. Honcamp**.
- Soini, B.** See **G. Weissenberger**.
- Sokhey, S. S.**, and **F. N. Allan**, relationship of phosphates to carbohydrate metabolism. I. Time relationship of the changes in phosphate excretion caused by insulin and sugar, i, 1368.
- Sokolowski, A. N.**, lime requirement of soils, and a new method of mechanical analysis, i, 1155.
- Soller, W.**, precision of X-ray spectrometer, ii, 652.
- Somazzi, S.** See **S. Fachini**.
- Someya, K.**, use of liquid amalgams in volumetric analysis. I. Use of zinc and bismuth amalgams, ii, 787.
- Sommelet, M.**, preparation of methylamine, i, 270.
- Sommerfeld, A.**, the theory of multiplets and their Zeeman effects, ii, 135.
- Somogyi, M.**, **E. A. Doisy**, and **P. A. Shaffer**, preparation of insulin, i, 898.
- Sonn, A.**, **E. Hotes**, and **H. Sieg**, synthetic experiments in the glyoxaline group, i, 877.
- Sonn, A.**, and **B. Scheffler**, lichen products. IV. Synthesis of divarinol, i, 849.
- Sonn, A.**, and **E. Schmidt**, preparation of sulphinanilides by means of Grignard's reaction, i, 1181.
- Soos, A. von**, photochemical reaction of urine, i, 1373.
- Soper, F. G.**, action of hydrogen chloride on a dry solution of a chloroamine, i, 504.
hydrolysis of the *p*-toluenesulphon-chloroamides in water, i, 1176.
- Sordelli, A.**, preparation of insulin, i, 1271.
- Sordelli, A.**, and **V. Deulofeu**, preparation of insulin, i, 1150.
- Sotscheck, F.** See **H. Scheibler**.
- Soula, L. C.** See **J. B. Abelous**.
- Souther, L.**, condensation reactions involving elimination of ester groups, i, 707.
- Southgate, H. W.**, dietetic value of barley, malt, and malted liquors as determined by their vitamin content, i, 1389.
determination by distillation of volatile constituents in blood, especially alcohol, ii, 359.
- Spacu, G.**, and **R. Ripan**, complex salts, i, 81.
- Spaete, R.** See **F. Hein**.
- Späth, E.**, and **O. Brunner**, angostura alkaloids. I. Synthesis of cusparine, i, 1226.
- Späth, E.**, and **H. Eberstaller**, angostura alkaloids. II. Synthesis of galipine, i, 1335.
- Späth, E.**, and **J. Gangl**, the anhalonium alkaloids. VI. Anhalonine and lophophorine, i, 69.
- Späth, E.**, and **K. Jeschki**, sparassol, i, 513.
- Späth, E.**, and **G. Koller**, the synthesis of ricinine, i, 204.
- Späth, E.**, and **E. Mosettig**, the constitution of corydaline, i, 74.
- Späth, E.**, and **S. Prokopp**, galegine, i, 502.
- Sparks, K. E.** See **G. D. Beal**.
- Speakman, H. B.**, molecular configuration in the sugars and acid production by *Bacillus granulobacter pectinovorum*, i, 371.
- Speakman, H. B.**, and **J. E. Philipps**, bacterial association. I. Production of lactic acid, i, 1015.
- Speakman, J. B.**, anomalous adsorption, ii, 664.
- Spehl, P.**, determination of dextrose by a modification of the method of Fontès and Thivolle, ii, 790.
- Spek, J. van der.** See **R. M. Barnette**.
- Spencer, G. F.**, determination of pancreatic enzymes in duodenal fluid by a modified Gaultier's method, ii, 636.
- Sperry, W. M.**, and **W. R. Bloor**, fat excretion. II. Quantitative relations of the faecal lipoids, i, 910.
- Speyer, E.**, and **K. Sarre**, action of reducing agents on bromocodeinone, i, 1229.
action of bromine on hydroxycodeinone and hydroxydihydrocodeinone, i, 1229.
catalytic hydrogenation of hydroxycodeinone- and hydroxydihydrocodeinone-hydrazones by palladium and hydrogen, i, 1230.
action of cyanogen bromide on hydroxycodeinone and hydroxydihydrocodeinone, i, 1231.

- Speyers, C. L.** See *T. W. Richards*.
- Spielmann, P. E.**, "bitumen" in meteorites, ii, 867.
- Spiers, C. H.**, substitution derivatives of aurin, i, 385.
- Spieß, E. A.** See *A. Löwenbein*.
- Spiescu, (Mlle.) E.** See *A. Ionescu*.
- Spiro, K.**, effect of phosphates in (magnesium) narcosis, i, 1139.
- Spitalski, E.**, electrochemical polarisation, ii, 838.
- Spitzer, G.**, and *M. C. Taylor*, effect of heat on the activity of the peroxydase in milk, i, 1379.
- Spitzer, G.** See also *E. H. Parfitt*.
- Spitz, W.** See *A. Zinke*.
- Spoehr, H. A.**, oxidation of carbohydrates with air, i, 836.
- Spoehr, H. A.**, and *J. M. McGee*, carbohydrate-amino-acid relation in the respiration of leaves, i, 810.
absorption of carbon dioxide the first step in photo-synthesis, i, 1392.
photosynthesis; an electrometric method of determining carbon dioxide, ii, 275.
- Spohn, A.** See *H. C. Sherman*.
- Springer, J. W.**, alkalimetry of zinc ammonium phosphate, ii, 627.
- Stadie, W. C.**, and *K. A. Martin*, thermodynamic relations of the oxygen- and base-combining properties of blood, i, 1009.
- Stadler, J.** See *K. Brass*.
- Stadnikov, G.**, action of esters on magnesium alkyl halides, i, 388.
chemical adsorption, ii, 833.
- Stäblein, F.** See *E. Maurer*.
- Staelin, H.** See *R. Weinland*.
- Stahl.** See *Volmar*.
- Stallmann, O.** See *K. Brand*.
- Stamatelakis, A.** See *H. Braun*.
- Stamm, A. J.** See *J. H. Mathews*.
- Stammers, A. D.**, feeding experiments in connexion with vitamin-A and -B.
V. Orange juice as a source of vitamin-B. VI. Ophthalmia in rats affected with avitaminosis. VII. The vitamin content of cod-liver oil and malt extract, i, 588.
- Stammreich, H.** See *A. Miethe*.
- Stander, H. J.**, chemistry of the blood during pregnancy, i, 1253.
chloroform poisoning, i, 1261.
- Stander, H. J.**, *E. C. Duncan*, and *B. L. Moses*, rate of excretion of urea in the toxemias of pregnancy, i, 1259.
- Standop, W.** See *A. Benrath*.
- Stanescu, P. P.**, quantitative diurnal variation of starch in green plant leaves, i, 354.
- Stanford, R. V.**, improvements in colorimetry, ii, 198.
method for the rapid and quantitative removal of ammonia from solutions, especially applicable to the micro-quantitative determination of nitrogen and urea in products of living origin, ii, 201.
nesslerisation, and the avoidance of turbidity in nesslerised solutions, ii, 201.
- Stanford, R. V.**, and *A. H. M. Wheatley*, determination of sugar in blood, ii, 359.
- Starczewski, B.** See *A. Joszt*.
- Starkey, R. L.** See *S. A. Waksman*.
- Starling, W. W.** See *H. W. Dudley*.
- Starlinger, W.**, the determination of fibrinogen. II., ii, 212.
- Stary, Z.** solubility and digestibility of proteins, i, 1007.
- Stasiak, A.**, cholesterol and bicarbonate content of blood in experimental kidney diseases, i, 440.
- Stather, F.**, glyceryl tri-*m*-nitrobenzoate, i, 1159.
- Stather, F.** See also *M. Bergmann*.
- Staub, H.**, *F. Günther*, and *R. Fröhlich*, changes in the ionic content of the blood after administration of insulin, i, 787.
- Staub, J.** See *P. Karrer*.
- Staub, M.** See *P. Karrer*.
- Stauber, F.** See *O. Fischer*.
- Staudinger, H.**, ketens. XLVII. The constitution of dimeric ketens; a contribution to the valency problem of organic chemistry, i, 294.
constitution of caoutchouc. VI., i, 974.
- Staudinger, H.**, and *P. G. Meyer*, ketens. XLIX. *cyclo*Butane derivatives from dimethylketen and ethylenic compounds, i, 296.
- Staudinger, H.**, *O. Muntwyler*, *L. Ruzicka*, and *S. Seibt*, insecticides. VII. Syntheses of chrysanthemumic acid and other *cyclo*propanecarboxylic acids with unsaturated side chains, i, 730.
- Staudinger, H.**, and *A. Rheiner*, the constitution of dicyclopentadiene, i, 274.
ketens. XLVIII. *cyclo*Butane derivatives from diphenylketen and ethylenic compounds, i, 295.
- Staudinger, H.**, and *L. Ruzicka*, insecticides. II. Constitution of chrysanthemum-mono- and -dicarboxylic acids, i, 510.
insecticides. IV. Constitution of tetrahydropyrene, i, 521.

- Staudinger, H.**, and **L. Ruzicka**, insecticides. V. Synthesis of tetrahydropyrethron, the reduction product of pyrethrolone, i, 522.
- insecticides. III. Constitution of pyrethrolone, i, 523.
- insecticides. I. Isolation and constitution of the active constituent of Dalmatian insect powder, i, 700.
- insecticides. VI. *cyclopentanolone* derivatives and their comparison with pyrethrolone, i, 747.
- insecticides. VIII. Preparation of alcohols similar to pyrethrolone, i, 748.
- insecticides. IX. Preparation of *cyclopentanolone* derivatives with unsaturated side chains, i, 750.
- insecticides. X. Synthesis of pyrethrines, i, 758.
- Staudinger, H.**, and **W. Widmer**, isoprene and caoutchouc. VII. Homologues of hydrocaoutchouc, i, 1330.
- Staveley, F. W.** See **M. S. Kharasch**.
- Steche, T.** See **A. Kotz**.
- Stechow, M.**, action of alkali on ethyl alcohol and the "nitric oxide reaction" of W. Traube, i, 1157.
- Stedman, E.**, physostigmine (eserine). II. Synthesis of physostigmol ethyl ether, i, 981.
- Steenbock, H.**, and **A. Black**, fat-soluble vitamins. XVII. Induction of growth-promoting and calcifying properties in a ration by exposure to ultra-violet light, i, 1272.
- Steenbock, H.** See also **R. M. Bethke**.
- Stefanini, L.** See **U. Sborgi**.
- Stegeman, G.** See **A. W. Harvey**.
- Stehle, R. L.**, and **W. Bourne**, mechanism of acidosis in anaesthesia, i, 900.
- Stehle, R. L.** See also **W. Bourne**.
- Steidler, F.**, microchemical reactions of zirconium and some related elements, ii, 788.
- Steiger, A. L. von**, determination of the hydrogen-ion concentrations of acid solutions with the aid of the glass electrode, ii, 696.
- Steigerwald, C.** See **S. Goldschmidt**.
- Stein, B. A.** See **T. Svedberg**.
- Stein, H.** See **K. Brand**.
- Steinberg, J. C.**, Hall effect and specific resistance of evaporated films of silver, copper, and iron, ii, 857.
- Steinberger, S.** See **R. F. Loeb**.
- Steinbring, E. F.** See **H. Adkins**.
- Steiner, P.**, spectrographic study of vegetable alkaloids; absorption of ultra-violet rays by alkaloids of the *isoquinoline* and *morphine* groups, i, 1096.
- Steingroever, A.** See **H. Fringsheim**.
- Steinhauser, F.** See **W. Manchot**.
- Steinherz, R.**, passive tin, ii, 689.
- Steinkopf, W.** [with **E. A. Haugen, A. Schkade, T. Höpner, and B. Nowy**], aliphatic nitro-compounds. XIV. The preparation of nitroacetic esters and the alkylation of their silver salts, i, 254.
- Steinkopf, W.**, and **W. Ohse**, thiophen series. XVII. Preparation of the "thiophen-isologue" of cocaine, i, 661.
- Steinkopf, W.**, and **A. Wolfram**, thiophen series. XVIII. Synthesis of the "thiophen-isologue" of atropine, i, 661.
- Steinmetz, H.** See **R. Willstätter**.
- Steinmetzer, K.** See **C. Schwarz**.
- Steinmetzer, L.** See **H. Meyer**.
- Stelling, O.**, chemical constitution and *K* absorption spectra. I. The investigation of certain compounds of phosphorus, ii, 139.
- Stender, W. W.** See **P. P. Fedotév**.
- Steopoe, A.** See **M. A. Mihăilescu**.
- Stepanov, D.** See **N. Isgarischev**.
- Stephenson, M.**, and **M. D. Whetham**, effect of oxygen supply on the metabolism of *Bacillus coli communis*, i, 913.
- Stephenson, R. E.**, and **W. L. Powers**, influence of sulphur oxidation on solubility of soil minerals, i, 1395.
- Stepp, W.**, and **I. Rothman-Manheim**, acetaldehyde content of the urine in normal and pathological conditions, i, 794.
- Steppuhn, O.**, and **A. Timofejeva**, cause of the rapid disappearance of catalase in blood solutions, i, 782.
- Steppuhn, O.**, and **X. Utkin-Ljubovzov**, animal urease, i, 790.
- autolysis. II. Effect of iodine on the autolysis of organs, i, 1149.
- determination of "Bayer 205" in serum, urine, and tissues, ii, 796.
- Stern, L.**, and **F. Battelli**, the rôle of carnisapidin and sarcoschromogen in animal tissues, i, 243.
- Stern, L.** See also **F. Battelli**.
- Stern, R.**, mechanism of syphilitic serological reactions; the protein fractions of human blood serum, i, 443.
- Sternlieb, I. H.**, phosphor-emetic [potassium phosphoryl tartrate], i, 611.
- Steubing, W.**, and **M. Toussaint**, variation of the band spectrum of nitrogen produced by the rare gases, ii, 217.
- Studel, H.**, and **S. Izumi**, yeast-nucleic acid. V. Methods of preparation of yeast-nucleic acid, i, 104.

- Steudel, H.**, and **S. Osato**, composition of herring ova. III. Researches on ova, using micro-methods, i, 116.
- Steudel, H.**, and **E. Feiser**, the carbohydraie group of thymonucleic acid. I. and II., i, 438, 1362.
- rational systematic classification of proteins. I. Chromoproteins, i, 1006.
- Steudel, H.**, and **E. Takahashi**, the composition of herring ova. IV., i, 116.
- Steudel, H.**, and **T. Takahata**, state of combination of nucleic acids in cell nuclei, i, 456.
- Stevens, H.**, distinction between citric and tartaric acids, ii, 353.
- Stevens, R. H.**, and **F. W. Ward**, tautomerism of the mesoxalic acid and pyruvic acid phenylhydrazones; evidence for the hydrazone structure of the tantomerides, i, 938.
- Stewart, A. W.** See **W. H. McVicker**.
- Stewart, C. P.**, and **J. B. S. Haldane**, experimental alterations in the calcium content of human serum and urine, i, 1364.
- Stichel, (Frl.) A.** See **J. Gadamer**.
- Stieglitz, J.**, oxidation of carbohydrates, i, 141.
- Stifler, W. W.** See **G. L. Clark**.
- Stiles, G. W.** See **L. G. Robino-vitch**.
- Stimpert, F. D.** See **J. W. Howard**.
- Stintzing, H.**, röntgenographic-chemical investigations. I. Röntgen spectra and the periodic system, ii, 83.
- röntgenographic-chemical investigations. II. Technique of röntgenology, ii, 83.
- röntgenographic-chemical investigations. III. Quantitative chemical analysis by means of Röntgen radiation, ii, 216.
- röntgenographic-chemical investigations. IV. Measuring instruments for high vacua, ii, 216.
- röntgenographic-chemical investigations, ii, 652.
- Stiven, D.**, effect of sodium trichloroacetate on the reduction of copper solutions by dextrose, ii, 354.
- Stix, W.** See **E. Abderhalden**.
- Stobbe, H.**, phototropy, ii, 11.
- Stock, A.**, and **W. Siecke**, boron hydrides. VII. Pentaboron hydrides, ii, 405.
- Stock, A., W. Siecke**, and **E. Pohland**, thermal decomposition of carbonyl sulphide. II., ii, 407.
- Stocker, R.** See **R. Tobler**.
- Stoddard, J. L.**, and **G. S. Adair**, the refractometric determination of hæmoglobin, ii, 76.
- Stoddard, J. L.** See also **L. J. Henderson**.
- Stöcklin, E.** See **H. Rupe**.
- Stoermer, R.**, and **F. Bacher**, stereoisomerism of the truxillic acids and the discovery of the remaining acid of this group. VIII., i, 400.
- Stoermer, R., C. W. Chydenius**, and **E. Schinn**, reduction products of 1-acylcoumarones, i, 409.
- Stoermer, R.**, and **F. Frick**, o-methoxydi-phenylacetaldehyde and its transformations, i, 405.
- Stöwener, F.** See **Robert Schwarz**.
- Stoklasa, J.**, physiological function of iodine in the sugar-beet, i, 356.
- absorption of ions from the soil through the root system of plants, i, 1018.
- Stoland, O. O.** See **L. Walling**.
- Stoll, M.** See **L. Ruzicka**.
- Stollé, R.**, carbonyldiphenylhydrazine, i, 881.
- [derivatives of *cyclotriazobutane*], i, 1239.
- Stollé, R.**, and **G. Adam**, action of azoimide on azodicarboxylic esters, i, 1352.
- Stollé, R.**, and **W. Becker**, *N*-aminoisatin, i, 987.
- Stollé, R.**, and **K. Leffler**, derivatives of *p*-phenylenedihydrazine, i, 1002.
- Stolyhwo, T.** See **K. Dziewoński**.
- Stone, S. B.** See **E. C. Bingham**.
- Stoner, E. C.** See **N. Ahmad**.
- Stooff, H.**, detection of nitrous acid, ii, 626.
- Story, L. S.**, and **E. Anderson**, action of arsenic trioxide in water solution on certain metallic hydroxides, ii, 332.
- Stott, V.**, apparatus for calibrating burette tubes, ii, 403.
- Strache, H.**, explosion limits and ignition temperatures of combustible liquids, ii, 319.
- Strantz, C. M. von.** See **H. Handovsky**.
- Stratford, R.** See **V. Grignard**.
- Straus, F.**, and **H. Grindel**, formation of alcohols and hydrocarbons by the catalytic hydrogenation of aromatic and aliphatic-aromatic carbonyl compounds, i, 1206.
- Strebingner, R.**, micro-gravimetric determination of copper as copper benzoinoxime, ii, 204.
- Strebingner, R.**, and **I. Pollak**, micro-analytical determination of copper and nickel, ii, 786.

- Strebinger, R.**, and **J. Streit**, determination of glycerol by oxidation with potassium iodate and sulphuric acid, ii, 572.
- Strebinger, R.**, and **J. Wolfram**, determination of tartaric acid by oxidation with potassium iodate and sulphuric acid, ii, 73.
- Strecker, W.**, the separation of arsenic from antimony and tin, ii, 202.
- Strecker, W.**, and **H. Heuser**, behaviour of esters of metaphosphoric acid and of phosphorous acid towards hydrazine, hydroxylamine, and their derivatives, i, 1159.
- Strecker, W.**, and **A. Jungck**, gravimetric and volumetric determination of potassium, ii, 59.
- Strecker, W.**, and **L. Schartow**, determination of nitrites, nitrates, and selenium, ii, 565.
- Streit, J.** See **R. Strebinger**.
- Strenk, C.** See **M. Centnerszwer**.
- Stricker, P.** See **A. Pictet**.
- Stricker, T.** See **E. F. Terroine**.
- Strupp, E.**, nature of lignin, i, 376.
- Stubbs, S. R.** See **O. C. de C. Ellis**.
- Stuber, B.**, **A. Russman**, and **E. A. Proebsting**, a methylation function of the thyroids and the biological significance of iodine, i, 239.
- Stumper, R.**, thermal decomposition of calcium hydrogen carbonate in aqueous solution, ii, 858.
- Stypinski, W.** See **K. Smoleński**.
- Sucharda, E.**, condensation of 2-aminonicotinic acid with chloroacetic acid to derivatives of 1:7-benzdiazole, i, 881.
- Sucharda, E.** See also **L. Klisiecki**.
- Sucharipa, R.**, protopectin and some other constituents of lemon peel, i, 477.
- Sudborough, J. J.** See **S. K. Gokhale**, **M. G. Kekre**, **M. R. Nayar**, and **H. E. Watson**.
- Süssenguth, O.** See **Wilhelm Schneider**.
- Suganuma**, influence of "collargol-blockade" of the liver on intermediary metabolism, i, 1370.
- Sugata, H.**, the effect of quinine on the iodine content of the thyroid gland, i, 118.
- Sugden, S.**, the variation of surface tension with temperature and some related functions, ii, 153.
the determination of surface tension from the maximum pressure in bubbles. II., ii, 154.
relation between surface tension, density, and chemical composition, ii, 662.
- Sugden, S.**, influence of orientation of surface molecules on surface tension of pure liquids, ii, 662.
- Suginomé, H.** See **R. Majima**.
- Sugiura, K.** See **K. G. Falk**, and (*Miss*) **H. M. Noyes**.
- Sugiura, Y.** See **H. Nagaoka**.
- Suk, V.** See **E. Pribyl**.
- Sullivan, M. X.**, **B. Cohen**, and **W. M. Clark**, oxidation-reduction. IV. Electrode potentials of indigotinsulphonates, i, 321.
- Sumi, M.** See **R. Yamamoto**.
- Sumner, J. B.**, the detection of pentose, formaldehyde, and methyl alcohol, ii, 70.
- Sumner, J. B.**, and **V. A. Graham**, dinitrosalicylic acid as a reagent for blood-sugar, ii, 72.
- Sun, K. F.**, electrolytic capacity and resistance of a platinum-rhodamine-B-platinum cell, ii, 526.
- Sundroos, B.** See **E. Hagglund**.
- Sung, W.** See **R. Locquin**.
- Supniewski, J.**, transformation of carbon compounds by *Bacillus pyocyaneus*, i, 914.
transformation of nitrogen compounds by *Bacillus pyocyaneus*, i, 914.
metabolism of cyclic compounds by *Bacillus pyocyaneus*, i, 914.
- Suppan, A.** See **F. Faltis**.
- Supplee, G. C.** See **A. F. Hess**.
- Sur, N. K.**, regularities in the spectrum of ionised titanium, ii, 801.
- Sur, N. K.**, and **R. K. Sharma**, absorption spectra of vapours of lead and tin, ii, 641.
- Sur, N. K.** See also **M. N. Saha**.
- Sure, B.**, dietary requirements for reproduction. I. Nutritive value of milk proteins from the point of view of reproduction. II. Existence of a specific vitamin for reproduction, i, 455.
amino-acids in nutrition. VI. Nature of the supplementary value of protein-free milk to the total proteins of the milk. VII. Cause of nutritive inadequacy of the proteins of the Georgia velvet bean (*Stizolobium deeringianum*), i, 684.
amino-acids in nutrition. VIII. Proline, i, 787.
- Suryanarayana, K.**, influence of light on aqueous solutions of potassium iodide, nitrate, and chlorate, ii, 675.
- Suszko, J.** See **K. Dziewoński**.
- Svanberg, O.**, and **S. W. Bergman**, diacetone [diisopropylidene] compounds of arabinose and galactose, i, 1285.

- Svanberg, O.**, and **K. O. Josephson**, the α - and β -forms of certain monosaccharides, i, 370.
- Svedberg, T.**, and **J. B. Nichols**, determination of size and distribution of size of particles by centrifugal methods, ii, 97.
- Svedberg, T.**, and **B. A. Stein**, density and hydration in gelatin sols, i, 104.
- Svedberg, T.** See also **E. O. Kraemer**.
- Svensson, D.**, action of urethanes on succinodihydrogenase, i, 1148.
- Swan, R. L.**, catalytic effects of the oxides of cerium and thorium, and their bearing on the theory of the Welsbach mantle, ii, 400.
- Swanger, W. H.**, and **E. Wichers**, separation of copper from platinum metals, ii, 703.
- Swanson, C. O.**, soil reaction in relation to calcium adsorption, i, 479.
graphical solution of certain ratios in temperature-concentration diagrams, ii, 304.
- Swanson, C. O.**, **P. L. Gainey**, and **W. L. Latshaw**, calcium content of soil in relation to absolute reaction, i, 820.
- Swarts, F.**, the catalytic hydrogenation of organic fluoro-derivatives. III. The hydrogenation of ω -trifluoro-*m*-cresol, i, 281.
- Sweeney, O. R.**, and **G. N. Quam**, permanent filter mats in Gooch crucibles, ii, 402.
- Swezey, F. H.** See **A. W. Browne**.
- Swientoslawski, W.**, ratio of equilibrium constants [for reactions] in gaseous and liquid phases, ii, 601.
- Swientoslawski, W.**, and **M. Popov**, thermochemical researches on stereoisomeric aldioximes, i, 645.
- Swientoslawski, W.**, **J. Waszkosienrenski**, and **W. Romei**, modification of the Washburn-Cottrell [ebullioscopic] apparatus, ii, 469.
- Swoboda, K.**, determination of manganese by the silver nitrate-per sulphate process, ii, 570.
determination of phosphorus in ferrovanadium, ii, 626.
- Sylvester, N. D.** See **W. Wardlaw**.
- Syrkin, J. K.**, absolute entropy and chemical constants of polyatomic gases, ii, 589.
- Szegvari, A.**, gelatinisation of nitrocellulose solutions, ii, 314.
ultramicroscopical investigations with unidirectional illumination; the ultramicroscopic mie-effect, ii, 315.
ultramicroscopical investigation of linear elements. I. Azimuth effect, ii, 834.
- Szegvari, A.**, ultramicroscopical investigation of linear elements. II. Sols with rod-shaped particles, ii, 835.
- Szegvari, A.** See also **E. Schalek**.
- Széki, T.**, some condensation products of hydroxyquinol trimethyl ether, i, 165.
- Szende, J.**, creatinine excretion of various domestic mammals, i, 1136.
- Szenes, A.**, the amount of calcium in the blood and of amino-acids in the serum in cases of struma and myositis ossificans, i, 1137.
- Szent-Györgyi, A. von**, biological oxidation. I. Absorption of oxygen by the system linoleic acid-SH group, i, 708.
biological oxidation. II. Mechanism and significance of SH-catalysis, i, 708.
biological oxidation. III. The oxide of the SH-group and oxidation by means of ethyl peroxide, i, 1284.
vacuum evaporation of aqueous fluids at low temperature, ii, 468.
micro-analysis by Pregl's method, ii, 495.
detection of higher multiple unsaturated free fatty acids in blood, ii, 508.
- Szent-Györgyi, A. von**, and **T. Tominaaga**, determination of the free fatty acids of blood, ii, 508.
- Szent-Györgyi, A. von.** See also **R. Brinkman**.
- Szentpály-Peyfuss, I.** See **C. Mayr**.
- Szyzskowski, B.**, dilution law for univalent salts, ii, 304.
- T.
- Tacchini, G.**, preparation of nitrites from nitrates, ii, 673.
- Tadenuma, K.**, influence of cell salts on intermediate metabolism, i, 789.
- Tänzer, C.** See **R. Scholl**.
- Taft, R.** See **L. C. Raiford**.
- Takagi, S.**, and **G. Hongo**, new constituent of *Atractylis ovata*, Thunb., i, 1274.
- Takahashi, E.** See **H. Studel**.
- Takahashi, Y.**, presence of inulase in takadiastase, i, 470.
hydrolysis of hexose-diphosphoric acid by various organs, i, 589.
enzymic hydrolysis of hexose-monophosphoric acid by extracts of the femur, i, 802.
- Takahashi, Y.** See also **L. Asher**.
- Takahashi, Yutaka**, band spectra and molecular structure, ii, 802.

- Takahata, T.**, iron content of nucleoproteins, i, 906.
rational systematic classification of proteins. II. Chondroproteins, i, 1006.
- Takahata, T.** See also *H. Steudel*.
- Takamine, T.**, and *M. Fukuda*, mercury line 2270 Å, ii, 637.
spectra of constricted arc of metals, ii, 800.
- Takao, K.**, thymolglycuronic acid, i, 244.
the decomposition of *d*-glucosamine by micro-organisms, i, 247.
- Takayanagi, T.**, fate of morphine in the animal body. I. Excretion of morphine in warm-blooded animals, i, 1012.
fate of morphine in the animal body. II. Destruction of morphine in the body of habituated and non-habituated rats, i, 1012.
determination of morphine in body fluids and organs, ii, 794.
- Takegami, S.**, contact potential, ii, 396.
- Takehara, K.**, electrolyte reactions in the presence of gelatin, and Liesegang rings, ii, 834.
- Takehara, K.** See also *I. Traube*.
- Takei, S.**, constitution of derris root. I., i, 478.
- Talbot, F. B.**, *E. B. Shaw*, and *M. E. Moriarty*, hypoglycæmia and acidosis, i, 1252.
- Tallerman, K.**, type of sugar excreted in the urine of normal persons, i, 897.
- Tamba, R.**, hydrotropic phenomena. II., ii, 522.
- Tambor, J.** See *H. Nägeli*.
- Tamele, M.**, electrolytic potential of calcium, ii, 742.
- Tammann, G.**, chemical changes at the glide planes and cleavage planes of crystals, ii, 25.
the analysis of the interior of the earth, ii, 163, 493.
voltages of the Daniel cell with fluid chlorides, and the potential series of the metals in fluid chlorides, ii, 485.
- Tammann, G.**, and *H. Bohner*, behaviour of liquid cuprous sulphide, ferrous sulphide, copper, and iron, ii, 554.
- Tammann, G.**, and *H. Bredemeier*, action of oxygen and the halogens on metallic mixed crystals, metals, and binary compounds, ii, 613.
- Tammann, G.**, and *H. Diekmann*, criterion of gas evolution from powdered substances, ii, 521.
- Tammann, G.**, and *C. F. Grevenmeyer*, thermal effects on the heating curves of barium, strontium, and calcium oxides and their carbonates in graphite tubes, ii, 179.
silicates. II. Nontronite and quartz mixture from St. Andreasberg, ii, 561.
- Tammann, G.**, and *M. Hansen*, ternary system, copper-tin-zinc, ii, 683.
- Tammann, G.**, and *A. Koch*, electromotive behaviour of the compound CoSn, ii, 490.
- Tammann, G.**, and *W. Krings*, the differences between mixed crystals obtained from melted salts and from solutions, ii, 175.
- Tammann, G.**, and *Q. A. Mansuri*, hardness of amalgams of tin, lead, zinc, cadmium, and copper, and of the ternary amalgam silver-tin-mercury, ii, 340.
- Tammann, G.**, and *C. F. Marais*, reduction of thin films of oxide on copper and nickel, ii, 485.
effect of temperature on the electrolytic potential of cadmium amalgams, ii, 682.
- Tammann, G.**, and *N. Nikitin*, pyrophoric property of metal powders, ii, 556.
- Tammann, G.**, and *E. Ohler*, heats of solution of metals in mercury and in gold amalgam, and some heats of mixing for amalgams, ii, 486.
- Tammann, G.**, and *P. Schafmeister*, partition of a metal between two liquid metallic phases, ii, 690.
- Tanaka, M.**, the catalytic hydrogenation of some unsaturated compounds, especially oils, by means of nickel at the ordinary temperature, i, 260.
- Tanaka, M.** See also *Y. Asahina*.
- Tanaka, N.** See *S. Komatsu*.
- Tanaka, S.**, and *J. Tsutsumi*, the *K*-series of the spectrum of molybdenum, ii, 78.
- Tanaka, T.**, cathodo-luminescence of solid solutions of forty-two metals, ii, 288.
active agents in luminescent fluor-spars and in corundum and spinel, ii, 467.
active agents in luminescent zinc sulphides, willemite, and kunzite, ii, 553.
- Tanaka, T.** See also *O. W. Richardson*.
- Tanaka, Y.**, *K. Horiuchi*, and *G. Ôyama*, naphthenic acids. IV. Metallic salts of naphthenic acids, i, 387.

- Tanaka, Y.**, and **S. Nagai**, naphthenic acid. III. Naphthenic acids from kubiki kerosene distillate, i, 168.
- Tananaev, N. A.**, detection of tin and mercury by means of a spot test, ii, 571.
- standardisation of potassium permanganate by means of metallic silver, ii, 628.
- Tanimura, M.** See **S. Komatsu**.
- Tanret, G.**, constitution of galeine, i, 622.
- Tapley, M. W.** See **H. I. Schlesinger**.
- Tarassoff, W.**, electrical nature of adsorption forces. I. Adsorption heats and dielectric constants, ii, 733.
- Tartakovsky, P.**, theory of band spectra, ii, 510.
- Tartar, H. V.**, and **C. Z. Draves**, reaction of sulphur with alkali and alkaline earth hydroxides in aqueous solutions, ii, 330.
- Tartar, H. V.**, **L. Wood**, and **E. Hiner**, basic calcium arsenate, ii, 411.
- Tartarini, G.** See **G. Scagliarini**.
- Tarugi, N.**, behaviour of formaldehyde. I. and II., ii, 355, 633.
- Tarugi, N.**, and **G. Gasperini**, determination of hardness of water, ii, 276.
- Tassilly, E.**, determination of, and protection against, carbon monoxide in air, ii, 782.
- Taube, C.** See **H. O. L. Fischer**, and **H. Leuchs**.
- Tavazzani, O.** See **G. Charrier**.
- Taverne, H. J.**, the content of copper and zinc in normal and carcinomatous tissues, i, 123.
- Tavernier, P.** See **P. Fleury**.
- Taylor, B. S.** See **R. Adams**.
- Taylor, C. A.**, and **W. H. Rinkenbach**, preparation and detonating qualities of cyanuric triazide, i, 22.
- the lead derivative of trinitroresorcinol, i, 281.
- specific heats of trinitrotoluene, "tetryl," picric acid, and their molecular complexes, i, 843.
- Taylor, C. M.** See **R. T. Haslam**.
- Taylor, F. A.** See **P. A. Levene**.
- Taylor, F. E.** See **J. W. Pickering**.
- Taylor, G. F.**, method of drawing metallic filaments; their properties and uses, ii, 541.
- Taylor, H. A.**, decomposition of hydrogen iodide, ii, 745.
- formation of phosphorus pentachloride from phosphorus trichloride and chlorine, ii, 752.
- Taylor, H. A.**, and **W. C. M. Lewis**, studies in chemical reactivity. II. The anthracene \rightleftharpoons dianthracene reactions, photochemical and thermal, ii, 580.
- Taylor, H. B.** See **J. F. Norris**.
- Taylor, H. G.** See **V. Lenher**.
- Taylor, H. S.**, third report of the Committee on contact catalysis, ii, 668.
- Taylor, H. S.** See also **R. A. Beebe**, and **A. L. Marshall**.
- Taylor, J.**, and **A. E. Dixon**, chloro-nitrobenzenes and thiocarbamides, i, 279.
- Taylor, J. K.** See **C. B. Lipman**.
- Taylor, M. C.** See **G. Spitzer**.
- Taylor, N. W.**, activities of zinc, cadmium, tin, lead, and bismuth in their binary liquid mixtures, ii, 89.
- Taylor, N. W.** See also **J. H. Hildebrand**, and **D. F. Smith**.
- Taylor, P. B.**, drop electrode in molten salt electrolyte, ii, 828.
- Taylor, T. W. J.**, solid phases of invariable composition, ii, 728.
- Taylor, T. W. J.**, and **R. F. Bomford**, apparent concentration of the hydrogen ion in solutions containing sucrose, i, 1286.
- Teeter, C. E.** See **J. N. Brönsted**.
- Telfer, S. V.**, mineral content of human milk in normal and rachitic families, i, 1373.
- Teller, H.** See **C. Schwarz**.
- Tempus, F.** See **M. Hönig**.
- Tenne, A.** See **F. Foerster**.
- Tennenbaum, M.** See **P. Rona**.
- Terada, S.** See **Y. Asahina**.
- Terada, Y.**, dialysis, ii, 455.
- colorimetric micro-determination of phosphoric acid, ii, 499.
- Terada, Y.** See also **A. Bethe**.
- Terenin, A.**, a photographic method in the infra-red, ii, 363.
- Terentiev, A.**, magnesium anilide, i, 1298.
- Terroine, E. F.**, **R. Bonnet**, **R. Jacquot**, and **G. Vincent**, comparison of yields from the point of view of energy in the development of moulds utilising carbohydrates or proteins, and specific dynamic action, i, 804.
- Terroine, E. F.**, **P. Fleuret**, and **T. Stricker**, comparative ability of deficient proteins and ammoniacal organic salts partially to satisfy the minimum nitrogen requirements, i, 1370.
- Terroine, E. F.**, and **St. J. Przylecki**, the rôle of pancreatic juice in the digestion of proteins; relative importance of trypsin and erepsin, i, 237.

- Terroine, E. F., S. Trautmann, R. Bonnet, and R. Jacquot**, culture of moulds on amino-acids and mechanism of the specific dynamic action, i, 807.
- Tertsch, H.**, growth of crystals, ii, 588.
- Terwen, J. W.**, adsorption of hydrogen by nickel, ii, 664.
- Tesh, K. S., and A. Lowy**, electrolytic preparation of salicylaldehyde from salicylic acid, i, 646.
- Testoni, G.**, [determination of] methyl-pentosans in cereals, ii, 790.
- Tetralin G.m.b.H., and W. Riebenschuh**, mono- and di-chloro-1-ketotetrahydronaphthalene, i, 1078.
- Tetrault, P. A.**, use of Clark and Lubs indicators for the detection of acid production by the colon-typhoid group, i, 914.
- Teucke, K.**, radiation produced by intensive bombardment of oxides with cathode rays, ii, 370.
- Teutenberg, F.** See *R. Anschütz*.
- Thannhauser, S. J.**, triphosphonucleic acid and thymic acid, i, 231.
- Thannhauser, S. J., and M. Jenke**, behaviour of β -glucose in the human body and the nature of the glucose in serum, i, 897.
- Thatcher, R. W.**, supposed calcium-nicotine compounds, ii, 635.
- Thayer, T. K.**, methyl ethyl sulphate as an alkylating agent, i, 604.
- Theis, R. C., and S. R. Benedict**, determination of phenols in blood, ii, 708.
- Theis, R. C.** See also *S. R. Benedict*.
- Theodosiu, C. N.** See *G. G. Longinescu*.
- Theyssen, M.** See *J. Gadamer*.
- Thibaud, J.**, γ -rays of very high frequency, emitted by radium, ii, 515. large quantum γ -rays and the photo-electric origin of the natural β -spectrum of radium, ii, 717.
- Thiel, A.**, indicators. VI. Theory and practice of the rational use of indicators in acidimetry, ii, 270. indicators. VII. Construction of titration curves, ii, 496.
- Thiel, A., and A. Dassler**, dual ion of helianthin and the dielectric behaviour of its solutions, ii, 388.
- Thiel, A., and W. Hammerschmidt**, overvoltage phenomena. II. Connection between the overvoltage of hydrogen as pure metal surface and certain properties of the metals, ii, 317.
- Thiel, A., and E. Meyer**, theory of the Landolt reaction, ii, 750.
- Thiel, A., and F. Bitter**, fusibility of carbon in the heat of the electric arc, ii, 253. determination of the vapour pressure of carbon, ii, 253.
- Thiel, A., and F. Wülfsen**, indicators. IX. Azo-indicators with asymmetric nuclei, ii, 622.
- Thiel, A., F. Wülfsen, and A. Dassler**, indicators. X. Influence of the solvent with special reference to the "alcohol error" of indicators, ii, 623.
- Thiel, E.** See *O. Fischer*.
- Thiel, F.** See *K. Ziegler*.
- Thiel, G. A.**, precipitation of manganese from meteoric solutions, ii, 489.
- Thiel, H.** See *H. Kautsky*.
- Thieler, E.** See *F. L. Hahn*.
- Thielmann, F.** See *F. Holtz, H. Reinwein, and K. Ziegler*.
- Thiersch, F.**, kinetics of coupled reactions, ii, 666.
- Thiessen, P. A.**, sensitiveness of gold hydrosol to ammonia, ii, 691. composition of some colloidal gold solutions, ii, 691. micro-determination of the oxide content of colloidal gold, ii, 768. conductivity measurements with the aid of a galvanometer, ii, 825.
- Thimann, W.** See *F. Paneth*.
- Thing, C.** See *F. A. Lee*.
- Thivolle, L.** See *G. Fontès*.
- Thoma, E.** See *W. Wislicenus*.
- Thomas, G.** See *W. Autenrieth*.
- Thomann, H.** See *M. Cloetta*.
- Thomas, A.**, absorption of metallic salts by fish in their natural habitat. II. The absorption of nickel by *Fundulus heteroclitus*, i, 453.
- Thomas, A. W., and A. Frieden**, ferric salt as the "solution link" in the stability of ferric oxide hydrosol, ii, 50.
- Thomas, A. W., and L. Johnson**, mechanism of the mutual precipitation of certain hydrosols, ii, 50.
- Thomas, A. W.** See also *H. C. Sherman*.
- Thomas, E.** See *J. Piccard*.
- Thomas, E. E.** See *W. P. Kelley*.
- Thomas, J.** See *H. A. E. Drescher*.
- Thomas, J. S., and W. Pugh**, germanium. I. The mineral germanite and the extraction of germanium and gallium therefrom, ii, 415.
- Thomas, M.** See *H. P. Kaufmann*.
- Thomas, W.**, approximate calculation of the orbits and probabilities of transition of the series electron in the sodium atom, ii, 433.

- Thomas, Walter**, colorimetric determination of carbohydrates in plants by the picric acid reduction method. II. Determination of starch and other "reserve" carbohydrates, ii, 631.
- Thomas, Walter, and R. A. Dutcher**, colorimetric determination of carbohydrates in plants by the picric acid reduction method. I. Determination of reducing sugars and sucrose, ii, 630.
- Thomas, William**. See *A. Findlay*.
- Thomason, R. W.** See *G. T. Morgan*.
- Thompson, F. C., and N. Tilling**, desulphurisation of iron pyrites, ii, 341.
- Thompson, F. P.** See *E. Knecht*.
- Thompson, G.**, ultra-violet absorption spectra of eugenol, i, 637.
- Thompson, L.** See *R. T. Dufford*.
- Thoms, H., and J. Schnupp**, constitution of antipyrine, i, 90.
- Thoms, H., and F. Unger**, *k*-[kombe-] strophanthidin, i, 1217.
- Thomsen, C.** See *K. Dachlauer*.
- Thomson, (Sir) J. J.**, the polarisation of double bonds, ii, 33.
re-combination of gaseous ions, chemical combination of gases, and unimolecular reactions, ii, 222.
electric discharge through gases at low pressures, ii, 646.
- Thorne, P. C. L.**, conversion of nickel carbonyl into carbonate in toluene solution, ii, 766.
- Thornley, S.** See *R. Robinson*.
- Thorpe, J. F.** See *J. W. Baker, F. Dickens, F. R. Goss, and C. K. Ingold*.
- Thorsen, V.**, arc spectrum of gold, ii, 4.
- Thouet, H.** See *J. Breddt*.
- Thresh, J. C.**, determination of lead in potable waters and in urine, ii, 349.
- Thro, W. C., and M. Ehn**, calcium in the blood, i, 1010.
- Thron, H.**, spontaneous combustion during work with dichloroethylene, i, 702.
- Thurlow, S.** See *M. Dixon*.
- Thurmond, G. I., and G. Edgar**, equilibrium between lactic acid and its anhydrides, i, 1034.
- Tian, A.**, measurement of small quantities of heat; use of the compensating microcalorimeter, ii, 240.
new electric oven, ii, 602.
- Tidmore, J. W., and F. W. Parker**, methods of studying the strength of soil acids, i, 1394.
- Tiede, E., and A. Scheede**, induction of luminescence by active nitrogen, ii, 7.
- Tiegs, O. W.**, mechanism of muscular action, i, 687.
- Tiffeneau, M., and (Mlle.) J. Levy**, stereoisomerism among trisubstituted $\alpha\beta$ -glycols and the production of stereoisomerides by inverting the order of introduction of the substituent radicals, i, 825.
- Tiffeneau, M., and A. Orékhov**, the hydrobenzoin rearrangement. I. Hydroanisoin, i, 283.
- Tiffeneau, M., and C. Torres**, hypnotic properties of hydrobenzoin and of its alkylated homologues (symmetrical diarylglycols); relations between physiological activity and molecular weight, i, 350.
- Tiffeneau, M.** See also *A. Orékhov*.
- Tilley, F. W.**, relation between the chemical composition of peptones and hydrogen sulphide production by bacteria, i, 1385.
- Tilling, N.** See *F. C. Thompson*.
- Tillmans, J., and R. Otto**, testing for incipient putrefaction [of foodstuffs], i, 792.
- Timm, J. A.** See *H. Hibbert*.
- Timofejewa, A.** See *O. Steppuhn*.
- Tisdall, F. F.** See *J. L. Gamble*.
- Tjaschelova, L. S.** See *A. E. Tschitschibabin*.
- Tobler, R., R. Stocker, J. Müller, and A. Bucher**, naphthothioindoxyls, i, 1333.
- Tocchi, A.** See *V. Cuttica*.
- Tocco, G.**, electrolytic preparation of antimony sulphides and thiosalts, ii, 268.
- Tocco, G., and N. Jacob**, electrolytic preparation of tin sulphides and thio-salts, ii, 267.
- Todd, E. W.**, the determination of niobium, tantalum, and titanium in minerals, ii, 207.
- Todd, G. W.**, velocity of oxidation of nitric oxide and its importance in nitrogen fixation, ii, 241.
- Tönnies, G.** See *O. Diels*.
- Toenniesen, E.**, what substance in the carbohydrate metabolism is acted on by insulin? i, 446.
pancreas and carbohydrate balance, i, 1128.
- Tönnis, W.**, classification and grouping of vitamins, i, 900.
- Tognazzi, V.**, chalkones and hydro-chalkones, i, 1324.
- Tolman, R. C.**, duration of molecules in upper quantum states, ii, 362, 509.
rotational specific heat of hydrogen, ii, 803.
- Tolman, R. C.** See also *E. C. White*.

- Tolstoi, E.**, glycolysis in blood of normal subjects and of diabetic patients, i, 895.
- Tomecko, C. G.**, and **R. Adams**, the allyl ethers of various carbohydrates i, 14.
- Tomíček, O.** See **I. M. Kolthoff**.
- Tomihisa, R.** See **G. Kita**.
- Tominaga, T.** See **A. von Szent-Györgyi**.
- Tomoff, G.** See **K. Jellinek**.
- Toms, H.**, crystalline bromides of linseed oil, i, 365.
- Tonini, L.** See **A. Mazzucchelli**.
- Tonks, L.**, characteristics of iron in high-frequency rotating magnetic fields, ii, 294.
- Topley, B.** See **C. N. Hinshelwood**.
- Torazzi, P.** See **G. Charrier**.
- Torres, C.** See **M. Tiffeneau**.
- Tottingham, W. E.**, **E. R. Schulz**, and **S. Lepkovsky**, extraction of nitrogenous constituents from plant cells, i, 598.
- Touches, J. P. des.** See **C. Moureu**.
- Toussaint, M.**, variations in the structure and intensity of band spectra due to molecular influences, ii, 2.
- Toussaint, M.** See also **W. Steubing**.
- Toverud, G.**, influence of diet on teeth and bones, i, 455.
- Tower, O. F.**, colloidal nickel hydroxide, ii, 237.
- Townend, D. T. A.** See **W. A. Bone**.
- Townsend, J. S.**, and **T. L. R. Ayres**, ionisation by collision in helium, ii, 221.
- Townsend, J. S.**, and **S. P. McCallum**, electrical properties of helium, ii, 375.
- Toyama, Y.**, oleic alcohol, i, 257.
unsaponifiable constituents (higher alcohols) of shark and ray liver oils. III., i, 604.
- Traetta-Mosca, F.**, and **F. Milletti**, lipase in sunflower (*Helianthus annuus*) seeds, i, 252.
- Traub, A.** See **A. Bistrzycki**.
- Traube, I.**, and **K. Takehara**, theory of Liesegang rings, ii, 834.
- Traube, W.**, and **W. Lange**, decomposition of calcium fluoride with concentrated sulphuric acid, ii, 609.
- Traube, W.**, **H. Zander**, and **H. Gaffron**, sulphamic ester and its isomerisation to compounds of the betaine type, i, 839.
- Trautmann, S.** See **E. F. Terroine**.
- Trautz, M.**, reactions occurring during the discharge of the oxygen-hydrogen cell, ii, 750.
- Trautz, M.**, and **W. Gerwig**, vapour pressure of liquid chlorine, ii, 671.
vapour pressure of liquid nitrosyl chloride, ii, 673.
- Trautz, M.**, and **K. Hebbel**, measurement of the specific heats, C_p , of gases by the differential method. II., ii, 589.
- Trautzel, K.** See **M. Bamberger**.
- Travers, and (Mlle.) Perron**, simple and double orthophosphates, ii, 676, 677.
simple and double orthophosphates. II. Applications to analyses, ii, 699.
- Treadwell, W. D.**, and **H. Johner**, oxalic acid as a titration standard, ii, 573.
- Trebing, K.** See **K. Brand**.
- Tréfouël, J.** See **E. Fournéau**.
- Tréfouël, (Mme.) J.** See **E. Fournéau**.
- Trendelenburg, P.**, adrenaline secretion in adrenaline glycamia, i, 449.
- Trénel, M.** See **R. Wilkendorf**.
- Triandafil, S.**, influence of temperature on the galvanic polarisation of nickel, ii, 743.
- Trilling, E.** See **R. Vogel**.
- Trimble, H.** See **O. Folin**.
- Tripp, K.** See **K. Ziegler**.
- Trivelli, A. P. H.** See **S. E. Sheppard**, and **E. P. Wightman**.
- Trobridge, G. W.** See **J. N. Friend**.
- Trocello, E.**, leucocytogenic properties of copper potassium cyanide, i, 1376.
- Trocello, E.** See also **C. Serono**.
- Tröger, J.**, and **O. Grünthal**, fluorescence, i, 540.
- Tröger, J.**, and **H. Meinecke**, the reactivity of the chlorine atom in the 2-position in quinoline and quinoline derivatives, i, 556.
- Troensegaard, N.**, reductive decomposition of proteins and toxicity of their decomposition products. V., i, 890.
- Troensegaard, N.**, and **I. Schmidt**, constitution of proteins, i, 581.
- Troop, R. S.** See **(Miss) W. L. Rolton**.
- Tropsch, H.**, and **O. Roelen**, the combustion of methane to formaldehyde, i, 253.
- Tropsch, H.**, and **A. Schellenberg**, effect of 5N-nitric acid on cellulose, dextrose, natural and artificial humic acids, and lignin, i, 619.
humic acids. I. Method of preparation, i, 619.
humic acids. II. Products of alkali fusion and heating under pressure, i, 620.
humic acids. III. Action of nitric acid on humic acids, i, 620.
humic acids. IV. Effect of certain reagents on humic acids, i, 621.
humic acids. V. Dry distillation of humic acid and its alkaline derivatives, i, 621.

- Tropsch, H.** See also *F. Fischer*.
- Trost, J. F.** See *G. N. Hoffer*.
- Trowbridge, P. F.** See *W. S. Ritchie*.
- Truche, C.**, method for preserving micro-organisms, i, 1013.
- Trümpler, G.**, determination of the potential of the alkali metals, ii, 526.
- Truffaut, R.** See *H. Gault*.
- Truffaut, G.**, and *N. Bezsonoff*, the form of nitrogen most favourable for higher plants, i, 477.
- Truszkowski, R.** See *O. L. Brady*.
- Tryhorn, F. G.**, and *S. C. Blacktin*, the formation of anomalous Liesegang bands, ii, 157.
- Tsamados, D.** See *M. Duboux*.
- Tschelincev, M. W.**, oxonium compounds; researches on the relative strength of the higher valencies of oxygen in different classes of organic compounds, i, 929.
- Tschirsch, A.**, and *F. Lüdy, jun.*, stick-lac, i, 194.
- Tschirvinski, P. N.**, ferronickel and troilite in meteorites, ii, 773.
- chemical composition of pallasite, ii, 773.
- Tschitschibabin, A. E.**, preparation of amino-substitution products of pyridine and quinoline series, i, 203.
- 4-methyl-2-ethylpyridine, i, 313.
- synthesis of 7-methoxychromanone, i, 537.
- condensation of aldehydes with ammonia in presence of alumina, i, 709.
- tautomerism of 2-aminopyridine. II. Formation of dicyclic derivatives of 2-aminopyridine, i, 987.
- Tschitschibabin, A. E.**, and *O. S. Bagdassarjan*, condensation of acetylene with hydrogen sulphide in presence of aluminium oxide, i, 1157.
- Tschitschibabin, A. E.**, and *N. P. Jeletzky*, the characteristic of pyridone tautomerism, i, 987.
- Tschitschibabin, A. E.**, and *A. W. Kirssanov*, amination of nicotine with sodamide and potassamide, i, 978.
- preparation of hydroxycarboxylic acids from hydroxypyridines, i, 988.
- Tschitschibabin, A. E.**, and *P. A. Moschkin*, the condensation of acetylene with ammonia in the presence of alumina, i, 313.
- Tschitschibabin, A. E.**, *P. A. Moschkin*, and *L. S. Tjaschelova*, condensation of acetaldehyde with ammonia in presence of alumina, i, 766.
- Tschitschibabin, A. E.**, and (*Mlle.*) *M. P. Oparina*, the synthesis of pyridine from aldehydes and ammonia, i, 312, 767.
- products formed when paraldehyde and aldehyde-ammonia are heated together, i, 766.
- condensation of propaldehyde with ammonia, i, 767.
- Tschugaev, L.**, [analysis of] complex compounds of platinum and palladium with organic sulphides, ii, 505.
- new series of acidoamidotetrammine derivatives of quadrivalent platinum. II., ii, 770.
- Tschugaev, L.** [with *W. Chlopín*], pentammine compounds of quadrivalent platinum, ii, 769.
- Tschugaev, L.**, and *S. Iljin*, complex compounds of bivalent platinum with organic disulphides and polysulphides, i, 704.
- Tschugaev, L.**, and *C. Ivanov*, complex compounds of palladium with organic mono- and di-sulphides, i, 704.
- Tschugaev, L.**, and *S. Krassikov*, complex sulpho-acids of platinum, ii, 268.
- Tschugaev, L.**, and *W. Malzschewsky*, conductivity of some compounds of platinum with thio-ethers. VIII., i, 934.
- Tschugaev, L.**, and *N. Vladimirov*, conductivity of platinum monosulphide compounds in solution in methyl alcohol. IX., i, 935.
- Tschuksanova, A.** See *N. D. Zelinski*.
- Tsubura, S.**, the internal secretion of the genital organs. I. The genital organs and carbohydrate metabolism, i, 237.
- the internal secretion of the genital organs. II. The genital organs and respiratory gaseous metabolism, i, 238.
- Tsujimoto, M.**, a new unsaturated fatty acid in sperm and dolphin oils, i, 135.
- [fish] liver oils, i, 239.
- Tsujimoto, M.**, and *K. Kimura*, preparation of the highly unsaturated acids of fish oils, i, 136.
- the highly unsaturated acids in cod-liver oil, i, 239.
- Tsukamoto, R.** See *L. Asher*.
- Tsutsumi, J.** See *S. Tanaka*.
- Tucan, F.**, kämmererite in chromite from Yugoslavia, ii, 560.
- Tucker, S. H.**, formation of 3-halogen-carbazoles from carbazole-3-diazonium halides, i, 766.
- Tudhope, T. M. A.** See *A. McKenzie*.

- Tukats, A.** See *B. von Issekutz*.
- Tunstall, R. B.** See *G. T. Morgan*.
- Turco, C. R. del.** See *N. Parravano*.
- Turner, L. A.**, the relation between the spectra and the sizes of the alkali metal atoms, ii, 136.
estimation of the average life of excited mercury atoms, ii, 362.
quantum defect and atomic number, ii, 797.
- Turner, L. A.** See also *K. T. Compton*.
- Tustanowska, L. von.** See *F. Feigl*.
- Tuyn, W.**, and *H. K. Onnes*, the electric resistance of pure metals. XII. Measurements of the electric resistance of indium in the temperature field of liquid helium, ii, 12.
measurements of the electrical resistance of indium in the range of temperature of liquid helium, ii, 445.
- Twiss, D. F.**, refractive index of caoutchouc, i, 758.
- Tykocinski-Tykociner, J.**, and *J. Kunz*, new photo-electric cell, ii, 586.
- Tyndall, A. M.**, and *G. C. Grindley*, emission from an incandescent platinum wire in air, ii, 376.
- Tyndall, E. P. T.**, Barkhausen effect [in steel], ii, 811.
- U.**
- Uberoy, R. L.** See *N. A. Yajnik*.
- Udden, A.**, and *J. C. Jacobsen*, excitation of the helium spectrum by electronic bombardment, ii, 283.
- Udluft, H.**, behaviour of ferric hydroxide, manganese dioxide, and humus sols towards carbonate, hydrogen carbonate, and clay, ii, 533.
- Ueberrack, K.** See *F. Höglér*.
- Uebersax, F.** See *V. Kohlschütter*.
- Ui, T.** See *H. Kondo*.
- Ulich, H.** See *P. Walden*.
- Ultée, A. J.**, wax from *Fagraea*, i, 1391.
- Underhill, F. P.**, and *A. Dimick*, metabolism of inorganic salts. IV. The content of inorganic salts in the blood in pregnancy, with especial reference to calcium, i, 452.
- Underhill, F. P.**, and *E. G. Gross*, metabolism of inorganic salts. V. Inorganic salt metabolism in cocaine poisoning, i, 453.
- Underhill, F. P.**, *E. G. Gross*, and *W. Cohen*, inorganic metabolism. III. Significance of phosphates in the production of tetany, i, 1255.
- Underhill, F. P.**, and *S. Karelitz, jun.*, influence of hydrazine on blood concentration and blood-sugar content, i, 462.
- Underhill, F. P.**, and *G. Wilens*, carbohydrate metabolism. XXI. The relation of sugar excretion to renal integrity, i, 445.
- Underwood, H. W.**, *jun.*, and *E. L. Kochmann*, the diphenic acid and the fluorenone series. I, i, 176.
diphenic acid series. II, i, 1197.
- Ungar, B.** See *E. Fromm*.
- Unger, F.** See *H. Thoms*.
- Unger, K.** See *K. Schaum*.
- Unnewehr, E. C.**, energy of the characteristic K-radiation from certain metals, ii, 137.
- Updegraff, H.**, and *H. B. Lewis*, organic constituents of saliva, i, 1373.
- Updegraff, H.** See also *H. B. Lewis*.
- Urbain, E.**, and *G. Urbain*, simultaneous presence of cerium and the rare earth [yttrium] metals in some zirconium minerals, ii, 194.
- Urbain, G.** See *E. Urbain*.
- Urban, (Mlle.) M.** See *H. Gault*.
- Ure, W.** See *E. H. Archibald*.
- Urey, H. C.**, distribution of electrons in the various orbits of the hydrogen atom, ii, 434.
- Ursk, H. W. van**, reaction of aromatic polynitro-compounds with alkali alkyl oxides, and its application, ii, 356.
evaluation of pepsin in the light of recent knowledge of enzyme action, ii, 432.
- Usherwood, E. H.**, the activation of hydrogen in organic compounds, i, 139.
- Uspenski, A.**, isomerisation due to the action of zinc dust and alcohol on the stereoisomeric dibromodimethylcyclohexanes, i, 1055.
- Utkin-Ljubovzov, L.** See *O. Step-puhn*.
- Utkin-Ljubovzov, X.** See *O. Step-puhn*.
- Utz, F.**, detection of ethyl phthalate in alcohol and alcoholic preparations, ii, 574.
- Uwatoko, Y.**, application of Folin's method for the determination of amino-nitrogen to peptic digestion, i, 1267.
- Uyeda, Y.**, and *J. Kamon*, sulphide acids. II. *iso*Butyl ether of thioglycollic acid [*isobutyl*thiolacetic acid], i, 1041.
- Uyesugi, T.** See *O. Warburg*.
- Uzac, R.** See *G. Dupont*.

V.

- Vahlen, E.**, metabolin and the internal secretion of the pancreas, i, 1150.
- Vaillant, P.**, rôle of the surface layer in the electrical conductivity of solid salts, ii, 456.
- Valdigué, A.** See *J. Aloy*.
- Valentine, A. T.** See *J. A. Harris*.
- Valeton, J. J. P.**, and *W. Frömel*, double salts of potassium chloride with cuprous chloride, ii, 762.
- Vallée, J.** See *E. Fourneau*.
- Vandecaveye, S. C.**, replacement of soil potassium, i, 599.
effect of certain potassium fertilisers on ammonification, nitrification, and crop production, i, 928.
- Vanderveelde, A. J. J.**, the precipitation of the lactoproteins by copper salts, i, 230.
halogenated proteins. I. Bromovalbumin, i, 678.
halogenated proteins. II. Bromopeptone, i, 779.
- Vanzetti, B. L.**, possibility of separating the isotopes of chlorine by fractional diffusion of sodium chloride solutions, ii, 404.
colouring matter of smoky quartz, ii, 406.
separation of isotopes by fractional diffusion in solutions, ii, 650.
- Varahalu, T., A. J. Ram, and B. S. V. R. Rao**, studies in phototropy. II. Mercury compounds, ii, 644.
- Varela and Rubino**, formation in the injured liver of a compound similar to dextrose but unsuitable for the organism, i, 683.
- Vaubel, W.**, tin hydride, ii, 414.
- Vavilov, S. J.**, fluorescent efficiency of solutions of dyes, ii, 288.
- Vavon, G.**, and *A. Couderc*, isomerism of menthol and neomenthol, i, 1210.
- Vecchiotti, L.**, action of mercuric acetate on *m*-toluidine and on *p*-chloroaniline, i, 957.
- Vegard, L.**, emission of light by solid nitrogen and origin of the auroral spectrum, ii, 436.
light emitted from solid nitrogen when bombarded with cathode rays and its bearing on the auroral spectrum, ii, 509, 805.
luminous spectra of solid nitrogen and their application to the aurora borealis and the diffuse light of the evening sky, ii, 584.
luminescence of solidified gases and its application to cosmical problems, ii, 713.
- Veil, (Mlle.) S.**, evolution of the molecule of cupric hydroxide in aqueous suspension, ii, 183.
evolution of the molecule of nickel hydroxide in contact with water, ii, 557.
- Velíšek, J.** See *W. P. Jorissen*.
- Venable, F. P.**, and *J. M. Bell*, atomic weight of zirconium, ii, 690.
- Venkaramaiah, Y.**, and *A. Janakiram*, nature of the radiant energy from a phototropically treated compound, ii, 644.
- Venkaramaiah, Y.**, and *B. S. V. R. Rao*, electrolytic production of active hydrogen, ii, 34.
- Venkatesachar, B.** See *E. P. Metcalfe*.
- Verhoeff, J. A.**, complex ferrous sulphate-ammonia compounds, ii, 765.
catalytic oxidation of ferrous sulphate by air in presence of copper salts, ii, 765.
- Verkade, P. E.**, calorimetric determinations. V. The history of the thermochemical standard substances, ii, 91.
- Verley, A.**, preparation of alcohols of the formulæ $R \cdot CH_2 \cdot CH_2 \cdot CH_2 \cdot OH$ and $R \cdot CR'H \cdot CH_2 \cdot CH_2 \cdot OH$ and the corresponding acids, starting with aldehydes, $R \cdot COH$, and ketones, $R \cdot CO \cdot R'$, i, 703.
constitution of farnesol; synthesis of dihydrofarnesol, a new aliphatic sesquiterpene alcohol, i, 825.
reduction of glycidic esters in the terpene series; synthesis of inactive citronellol and rhodinol, i, 865.
sodamide as a dehydrating agent; preparation of indole, methylindole, and homologues, i, 1106.
- Vermehren, H.** See *A. Rosenheim*.
- Vernadski, V.**, and *(Mlle.) C. Chamié*, pseudomorph of curite, ii, 621.
- Vernadski, V.** See also *V. Agafonoff*.
- Vernay, J.**, determination of manganese by the persulphate method in the presence of hydrofluoric acid, ii, 628.
- Vernimmen, R.**, preparation of ethers from secondary alcohols by dehydration with a sulphonic acid, i, 825.
- Verschaffelt, J. E.**, polarisation of electrodes. III., ii, 317.
- Verzyl, E. J. A. H.**, and *I. M. Kolthoff*, potentiometric titration of zinc with ferrocyanide, ii, 501.
- Verzyl, E. J. A. H.** See also *I. M. Kolthoff*.
- Vickery, H. B.**, nitrogenous constituents of the juice of the alfalfa plant [lucerne]. I. Amide and amino-acid nitrogen, i, 1275.

- Viekery, H. B.**, nitrogenous constituents of the juice of the alfalfa plant [Lucerne]. II. Basic nitrogen, i, 1393.
- Vieli, G.** See **F. Zetzsche**.
- Vieweg, E.** See **J. Meisenheimer**.
- Vieweg, R.**, contact difference of potentials between metals in a vacuum, ii, 457.
- Vigneaud, V. du.** See **C. S. Marvel**.
- Vila, A.**, determination of small quantities of molybdenum; application to ammonium phosphomolybdate for the indirect titration of phosphorus, ii, 65.
- Vilbrandt, F. C.**, correction tube for gas burettes, ii, 775.
- Vilbrandt, F. C.**, and **J. A. Bender**, solubility of nickel sulphate by the floating equilibrium method, ii, 51.
- Vilim, F.** See **L. Ruzicka**.
- Vincent, G.** See **E. F. Terroine**.
- Vining, D. C.** See **C. S. Gibson**.
- Vining, W. H.** See **A. F. G. Cadenhead**.
- Vinogradov, L.** See **K. Jellinek**.
- Vinogradski, S.**, microscopical study of soil, i, 1395.
- Vintilescu, J.**, and **D. Faltis**, the action of iodine on several carbohydrates, i, 268.
- Virtanen, A. I.**, fission and synthesis of esters by lipase from the lacteal glands and from milk, i, 908.
- enzymic studies on lactic acid bacilli. I. and II., i, 915, 1145.
- Vita, N.** See **M. Padoa**.
- Vladimirov, N.** See **L. Tschugaev**.
- Vleck, J. H. van**, absorption of radiation by multiply periodic orbits, and its relation to the correspondence principle and the Rayleigh-Jeans law. I. Extensions of the correspondence principle. II. Calculation of absorption by multiply periodic orbits, ii, 797.
- Vliet, E. B.**, preparation and hydrolysis of substituted cyanamides: di-*n*-butylcyanamide and diallylcyanamide, i, 717.
- Vliet, P. G. van de**, monochloro-trinitrobenzenes and the replacement of their substituents, i, 1293.
- Voegtlin, C., H. A. Dyer**, and **D. W. Miller**, drug resistance of trypanosomes, i, 796.
- Voegtlin, C., J. M. Johnson**, and **H. A. Dyer**, viscosity and toxicity of arsenphenamine [salvarsan] solutions, ii, 911.
- Voeth, V.** See **S. Goldschmidt**.
- Vogel, I.**, constitution of the thionic acids, ii, 470.
- Vogel, R.**, and **E. Trilling**, gold-chromium alloys, ii, 54.
- Vogt, T.**, rare earths in yttrifluorite from Hundholm, ii, 494.
- Vogt, W.** See **K. Brand**.
- Voigt, A.**, and **W. Biltz**, electrolytic conductivity of molten chlorides, ii, 552.
- Voit, K.** See **R. Feulgen**.
- Vollmer, W.** See **E. Weitz**.
- Volmar**, photolysis and the law of the photo-chemical equivalent, ii, 244.
- Volmar**, and **Stahl**, influence of stirring on the formation of precipitates, ii, 394.
- Volwiler, E. H.**, hypnotic and analgesic compounds from dimethylamino-phenyldimethylpyrazolone and dialkylbarbituric acids, i, 668.
- Volwiler, E. H.**, and **R. Adams**, synthetic anaesthetics [alkylaminoalkyl *p*-aminobenzoates], i, 640.
- Voroshkov, N.**, naphthalene and its derivatives, i, 1242.
- Vosburgh, W. C.**, and **M. Eppley**, effect of various preparations of mercurous sulphate on the electromotive force and hysteresis of Weston standard cells, ii, 149.
- Vose, R. F.** See **W. R. Orndorff**.
- Voskressenski, A.**, digestion of gums by organisms and enzymes; digestion of cherry tree gum in vitro, i, 692.
- Voss, H.** See **H. P. Kaufmann**.
- Votchak, E. P.**, wood sap. I. Presence of enzymes in wood sap. II. Variations in the amount of oxydases in wood sap during the bleeding period, i, 251.
- Votoček, E.**, and **P. Jiru**, halogenated aromatic hydrazines. I. 3:4-Dibromophenylhydrazine, i, 887.
- Votoček, E.**, and **R. Lukes**, halogen-substituted aromatic hydrazines. II. 2:3-, 2:5-, 2:6-, and 3:5-Dibromophenylhydrazines and *p*-bromophenylmethylhydrazine and their reaction products with aldehydes and ketones, i, 1120.
- Vournazos, A. C.**, formation of bismuthamines, i, 1049.
- Vuillaume, M.** See **A. Boutaric**.

W.

- Wachendorff, E.** See **E. Berl**.
- Wadewitz, M.**, and **B. Rassow**, carbylamine reaction, ii, 430.
- Wadewitz, M.** See also **B. Rassow**.
- Wagner, C. L.**, and **C. Hauffen**, diffusion of potassium sulphate in jellies containing barium chloride, ii, 729.

- Wagner, C. R.**, characteristics of the hydrocarbons in [American] mid-continent kerosene, i, 357.
- Wagner, E., C. C. Dozier, and K. F. Meyer**, anaërobic bacteria. I. Growth and biochemical activities of *Bacillus botulinus*, *B. sporogenes*, and *B. tetani*, i, 1013.
- Wagner, E.** See also *C. C. Dozier, E. Knoevenagel, and W. König*.
- Wagner, E. C.**, accurate evaluation of potassium chlorate by the method of Bunsen, ii, 563.
- Wagner, R.** See *S. Goldschmidt, and E. Helmreich*.
- Wagner, W.** See *W. Biltz, and Ernst Müller*.
- Wagstaff, J. E. P.**, the characteristic vibration frequency of an element, ii, 137.
- electrical method of determining the velocity of detonation of explosives, ii, 319.
- effect of an electric current on the motion of mercury globules in dilute sulphuric acid, ii, 457.
- Wahl, A., and W. Hansen**, transformation and constitution of disulphoisatide, i, 322.
- constitution of isatan and isatide, i, 322.
- Wahl, A.** See also *Société Anonyme des Matières Colorantes, et Produits Chimiques de St. Denis*.
- Wahle, O.** See *Erich Müller*.
- Wahlin, H. B.**, motion of electrons in nitrogen, ii, 291.
- Wakeman, A. J.** See *C. S. Leavenworth*.
- Waksman, S. A.**, influence of micro-organisms on the carbon : nitrogen ratio of the soil, i, 1271.
- Waksman, S. A., and O. Heukeleian**, microbiological analysis of soil as an index of soil fertility. VIII. Decomposition of cellulose, i, 928.
- Waksman, S. A., and P. D. Karunakar**, microbiological analysis of soil as an index of soil fertility. IX. Nitrogen fixation and mannitol decomposition, i, 1023.
- Waksman, S. A., and R. L. Starkey**, microbiological analysis of soil as an index of soil fertility. VII. Carbon dioxide evolution, i, 818.
- Walbaum, H., and A. Rosenthal**, oak moss oil, i, 758.
- Walbum, L. E.**, effect of metallic salts on the bactericidal action of blood-plasma, i, 795.
- Walde, H.** See *A. Lottemoser*.
- Walden, P.**, calculation of the limiting value λ_{∞} of the equivalent conductivity of uni-univalent and uni-n-valent salts in aqueous and non-aqueous solutions, ii, 387.
- Walden, P., and H. Ulich**, dependence of the mobility of univalent ions on the temperature, ii, 95.
- Walden, P., and O. Werner**, dielectric constants of chlorinated paraffins and olefines, ii, 648.
- Waldie, A. T.** See *C. B. Bazzoni*.
- Waldo, J. H.** See *H. A. Shonle*.
- Waldron, W. R., and E. E. Reid**, the influence of sulphur on the colour of azo-dyes, i, 95.
- Waldschmidt-Leitz, E.** See *R. Willstätter*.
- Wales, H.**, constitution of guinea-green B, i, 1350.
- properties of dyed materials, ii, 217.
- Wales, H.** See also *S. Palkin*.
- Walker, A. J.** See *F. D. Chattaway*.
- Walker, E. E.**, molecular association of liquids and highly-compressed gases. I. and II., ii, 144.
- molecular association of liquids and highly compressed gases. III. Molecular association of liquids, ii, 232.
- properties of powders. VIII. Influence of velocity of compression on apparent compressibility of powders, ii, 520.
- Walker, E. E.** See also *T. M. Lowry*.
- Walker, G.**, the determination of cineole in essential oils, ii, 131.
- Walker, T. K.**, condensation of aryl-diazonium salts and of alkyl nitrites with derivatives of cyanoacetic acid, i, 1119.
- Walker, T. L.**, hafnium or jargonium, ii, 53.
- Wallach, O.**, terpenes and ethereal oils. CXXVIII. Condensation of intracyclic ketones with two mols. of aromatic aldehydes, i, 756.
- terpenes and ethereal oils. CXXIX. Review of the boiling points of stereoisomeric modifications of alicyclic compounds, i, 756.
- Wallach, O., and A. Weissenborn**, terpenes and ethereal oils. CXXVII. Diosphenol (buchu-camphor) and homologous compounds, i, 862.
- Walle, H. van de**, preparation of *aa*-dichloro-*B*-bromoethylene, i, 1027.
- Wallis, E.** See *H. von Euler*.
- Walling, L., and O. O. Stoland**, catalytic action of blood, i, 679.
- Wallingford, V. H.** See *J. B. Conant*.
- Wallington, R. W.** See *F. E. Francis*.

- Wallis, E.** See *T. Posner*.
- Wallis, E. S., and G. H. Burrows,** composition of soja bean oil, i, 1161.
- Walter, B.,** reflection of the characteristic Röntgen radiation associated with the chemical elements composing a crystal by the elements, ii, 84.
- Walter, E.** See *A. Binz*.
- Walter, R.** See *G. C. Schmidt*.
- Walters, F. M.,** regularities in the arc spectrum of iron, ii, 285.
- Walther, E.** See *H. Paweck*.
- Waltner, K.,** hydrogen-ion concentration of the cerebro-spinal fluid of children, i, 1256.
- Walton, J. H., and J. D. Jenkins,** ternary system, toluene-acetone-water, i, 156.
- Walton, J. H., and L. L. Withrow,** a new method for the determination of acetic acid in acetic anhydride, ii, 209.
- Wandenbulcke, F.** See *F. Diénert*.
- Wang, C. C., and L. H. Davis,** comparison of the metabolism of some mineral constituents of cow's milk and of human milk, i, 1257.
- Wang, C. C., and A. R. Felsner,** effect of alcoholic extract of commercial dextrose on urinary reducing substance, i, 1373.
- Wang, C. C.** See also *J. H. Hess*.
- Wantz, M.** See *J. Sigrist*.
- Warburg, E.,** formation of hydrogen iodide by the silent electrical discharge, ii, 322.
- Warburg, O.,** the basis of the oxidation theory of Wieland, i, 242.
- Warburg, O., and W. Brefeld,** activation by iron of charcoals containing nitrogen, ii, 466.
- Warburg, O., and E. Negelsin,** [theory of the assimilation of carbon dioxide], ii, 241.
- Warburg, O., and S. Sakuma,** the supposed autoxidation of cysteine, i, 138.
- Warburg, O., and T. Uyesugi,** Blackman's reaction, i, 922.
- Warburg, O., and M. Yabusoe,** oxidation of lævulose in phosphate solutions, i, 713.
- Warburton, F. W.** See *F. K. Richtmyer*.
- Ward, A. T.** See *E. B. R. Prideaux*.
- Ward, F. A.,** thermal conductivity of bismuth in a transverse magnetic field, ii, 812.
- Ward, F. W.,** the absorption spectra of some amino-acids; the possible ring structure of cystine, i, 272.
- Ward, F. W.,** the absorption spectra of some indole derivatives, i, 314.
- the absorption spectra of kynurenic acid and some related quinoline compounds,** i, 315.
- the fate of indolepropionic acid in the animal organism,** i, 345.
- Ward, F. W.** See also *R. H. Stevens*.
- Wardlaw, W., F. H. Nicholls, and N. D. Sylvester,** compounds of tervalent molybdenum. I., ii, 766.
- Ware, A. H.,** apparently specific test for tannins, ii, 789.
- Wark, I. W.,** metallic hydroxy-acid complexes. III. Constitution of cuprimalates and analogous compounds, i, 1283.
- Warren, L. E.,** compound of "benzo-caine" and iodine, i, 962.
- Wartenberg, H. von, A. Muchlinski, and G. Riedler,** formaldehyde, i, 834.
- Waser, E., and E. Brauchli,** the phenylalanine series. V. Hydrogenation of tyrosine, i, 1068.
- Washburn, E. W.,** apparatus for the determination of melting and freezing points of pure substances and of eutectic mixtures, ii, 344.
- Wastl, H.,** surface tension of saponin solutions, ii, 462.
- Wastl, H.** See also *E. Kupelwieser*.
- Waszkosienrenski, J.** See *W. Swien-toslawski*.
- Waterhouse, E. F.** See *W. R. Schoeller*.
- Waterman, A. T.,** variation of the thermionic emission with temperature and the concentration of free electrons within conductors, ii, 809.
- Waterman, H. I., and P. Kuiper,** antiseptic action of benzoic acid, salicylic acid, cinnamic acid, and their salts, i, 912.
- Waterman, H. I., and J. N. J. Perquin,** conversion of [solid] paraffin by heating under pressure in the presence of hydrogen, methane, and other gases, i, 601.
- Waterman, H. I., and H. J. W. Reus,** the cracking process of Burton, i, 254.
- Waterman, N.,** glycolytic properties of the cancer cell, i, 1374.
- Watkins, C. M.** See *F. E. Francis*.
- Watson, F. S.** See *J. B. Firth*.
- Watson, H. E., and J. J. Sudborough,** relation between the iodine values and refractive indices of hardened oils. II., i, 1033.
- Watson, H. E.** See also *S. K. Gokhale, M. G. Kekre, and M. R. Nayyar*.

- Watt, J. C.**, behaviour of calcium phosphate and calcium carbonate (bone salts) precipitated in various media, with applications to bone formation, i, 119.
- Watts, H. G.** See **E. J. Bowen**, and **F. D. Chattaway**.
- Watts, O. O.**, lecture table demonstration to illustrate that the conductivity of a solution is due to its ions, ii, 671.
- Watts, O. O.** See also **P. M. Dean**.
- Weaver, E. R.** See **P. G. Ledig**, and **P. E. Palmer**.
- Weaver, S. D.** See **C. K. Ingold**.
- Webb, H. W.**, metastable state in mercury vapour, ii, 638.
- Weber, B.** See **G. Jander**.
- Weber, C. J.** See **A. P. Briggs**.
- Weber, I.** See **P. A. Levene**.
- Weber, J.** See **W. Lipschitz**.
- Webster, T. A.**, and **L. Hill**, supposed influence of irradiated air on growth, i, 789.
- Wedekind, E.**, magneto-chemical investigations, ii, 225.
- Wedekind, E.** [with **C. Weinand**], ketopinic acid; conversion into norcamphane-1-carboxylic acid, i, 639.
- Wedekind, E.**, and **K. Fleischer**, the constitution of sparassol, i, 174. sparassol, i, 966.
- Wedekind, E.**, and **R. Krecke**, seneginin [seneginic acid], the ultimate sapogenin from *Radix senegae*, i, 976.
- Wedekind, E.**, and **H. Wilke**, adsorption as a preliminary to chemical combination, and adsorption measurements on zirconium oxide gels, ii, 238, 734. adsorption by zirconium oxide gels. III. Hydrogen peroxide, hydrochloric acid, and perchloric acid, ii, 594.
- Wedgwood, P. E.**, and **F. L. Ford**, value of Bezssonoff's reaction for indicating the presence of vitamin-C in the juice of sauerkraut, i, 685.
- Weeks, E. J.**, hydrogen overvoltage of metals and their characteristic properties. I. Overvoltage and valency, ii, 457. hydrogen overvoltage of metals and their characteristic properties. II. Overvoltage and melting points, ii, 527.
- Weeks, E. J.**, and **J. G. F. Druce**, solid hydride of arsenic, ii, 606.
- Weeks, E. J.**, and **W. V. Lloyd**, preparation of pure silver antimonide, ii, 43.
- Weeks, E. J.** See also **H. J. S. Sand**.
- Weeldenburg, J. G.**, determination of nickel in ores and alloys by means of dimethylglyoxime, ii, 629.
- Weevers, T.**, the first carbohydrates that originate during the assimilatory process; physiological study with variegated leaves, i, 810.
- Wege, W.** See **W. Schrauth**.
- Wegener, G.** See **K. von Auwers**.
- Wegmann, E.** See **J. Sarasin**.
- Wehmer, C.**, mutual relationship of the formation of oxalic and citric acids with different species of *Aspergillus niger*, i, 1282.
- Weichherz, J.**, and **Z. Klinger**, determination of iodine in iodides, ii, 420.
- Weichselfelder, T.** See **W. Schlenk**.
- Weigert, F.**, history of carbon dioxide assimilation, i, 922.
- Weigert, F.**, and **G. K  ppler**, polarisation of fluorescent light from dye solutions, ii, 583.
- Weigert, F.**, and **K. Kellermann**, photochemistry of chlorine, ii, 8.
- Weimarn, P. P. de**, so-called colloids of the first order, ii, 459.
- Weinand, C.** See **E. Wedekind**.
- Weiner, F.** See **F. Feigl**.
- Weinhagen, A.** See **P. Karrer**.
- Weinland, R.**, and **E. Bauer**, complex compounds of lead acetate [and propionate] and the corresponding salts of the metals of the alkaline earths, i, 1160.
- Weinland, R.**, and **P. Huthmann**, pyrocatechol compounds of hexa- and quinque-valent molybdenum, i, 1306.
- Weinland, R.**, **K. Kessler**, and **A. Bayerl**, constitution of the compounds formed by the action of acetic acid and its salts on ferric chloride and ferric nitrate, ii, 265.
- Weinland, R.**, and **E. Mergenthaler**, ferri-chromic acid compounds, ii, 490.
- Weinland, R.**, and **F. Paul**, lead acetato-(oxalato-)complexes and basic lead salts, ii, 45.
- Weinland, R.**, and **H. Staelin**, fluorochromates and acid chromates, ii, 618.
- Weinmann, F.** See **M. Bergmann**.
- Weinstock, M.** See **A. F. Hess**.
- Weintraut, M.**, significance of determinations of uric acid in urine, particularly in gout, related diseases, and uric acid diathesis, i, 909. analysis of urine, i, 1373.
- Weiser, H. B.**, adsorption by precipitates. VI., ii, 309. formation of inorganic jellies, ii, 535.
- Weiser, H. B.**, and **A. P. Bloxson**, formation of arsenate jellies, ii, 252.

- Weishaupt, E.** See *T. Zincke*.
- Weiss, B.** See *H. Fischer*.
- Weiss, J. M., and C. R. Downs,** salts of maleic, fumaric, and *i*-malic acids, i, 10.
- Weiss, J. M., C. R. Downs, and R. M. Burns,** oxide equilibria in catalysis, ii, 30.
- Weiss, P.,** electrostatic nature of the molecular field, ii, 294.
atomic moments, ii, 716.
- Weiss, P., and (Mlle.) P. Collet,** paramagnetism independent of temperature, ii, 586.
- Weiss, P., and R. Forrer,** magnetothermal phenomenon and the specific heat of nickel, ii, 378.
magnetic isothermals of nickel, ii, 379.
- Weiss, R., and D. Rapport** [with *J. Evenden*], animal calorimetry. XXVI. Inter-relations between certain amino-acids and proteins with reference to their specific dynamic action, i, 1254.
- Weiss, R.** See also *R. Lesser*, and *D. Rapport*.
- Weiss, S.** See *J. Hollé*.
- Weiss, W.** See *E. Koenigs*.
- Weissenberg, K.** See *H. Mark*.
- Weissenberger, G., and E. Soini,** hydration of anhydrite. II. and III., ii, 109, 337.
- Weissenborn, A.** See *O. Wallach*.
- Weissgerber, R.,** low-temperature tar oils, i, 955.
- Weissmann, H.,** influence of a deficiency of potash on the development of barley manured with different amounts of sodium nitrate, i, 477.
- Weitemeyer, H.** See *W. Wislicenus*.
- Weitkamp, H.** See *H. S. Fry*.
- Weitz, E., T. König, and L. von Wistinghausen,** free ammonium radicals. V. Comparison of 1:1'-dibenzyl- and 1:1'-diphenyl-4:4'-dipyridinium, i, 425.
- Weitz, E., and W. Vollmer,** preparation of sodium hyponitrite, ii, 608.
- Weldon, P. R.** See *A. E. Dawkins*.
- Wells, H. L.,** a caesium cupric mercuric chloride, $\text{Cs}_2\text{CuHgCl}_6$; the failure to prepare Cs-Cu-Cd or Cs-Cu-Zn chlorides; and the varying complexity of certain triple salts, ii, 43.
- Wells, H. S.** See *P. D. Lamson*.
- Welo, J. A.** See *O. Baudisch*.
- Welti, (Mlle.).** See *R. Clogne*.
- Weltzien, W., F. Michael, and K. Hess,** halochromic phenomena with phenylethynylcarbinols, i, 40.
- Weltzien, W.** See also *K. Hess*.
- Wendt, M.** See *R. Seeliger*.
- Wenger, P., and M. Schilt,** separation of mercury and arsenic, ii, 873.
- Wenmakers, P. M.** See *P. A. Goverts*.
- Wentzel, G.,** spark lines in X-ray spectra, ii, 368.
series spectra in the emission of which more than one electron are concerned, ii, 434.
- Wenzel, C.,** determination of tantalum and niobium, ii, 571.
- Wenzel, E.** See *H. Kraut*.
- Wenzke, H. H., and J. A. Nieuwland,** the catalytic condensation of acetylene with phenols, i, 232.
- Wenzl, H.,** determination of lignin in wood cellulose, ii, 429.
- Werner, A.** See *H. Geiger*.
- Werner, F.** See *H. Schmalfuss*.
- Werner, O.,** microchemical identification of α -monoamino-acids, ii, 131.
- Werner, O.** See also *P. Walden*.
- Werner, S.** See *H. M. Hansen*.
- Wernicke, R.,** use of electrolysis in the determination of total bases in sera and other substances, ii, 431.
- Wertheimstein, L., and (Mlle.) H. Dobrowolska,** diffusion of radioactive elements in metals, ii, 12.
- Wertheim, R.** See *Erich Müller*.
- Wertheimer, E.,** non-reciprocal permeability. III. Non-reciprocal permeability of ions and of colouring matters, i, 686.
non-reciprocal permeability. IV. Salt effect on the living membrane, i, 1011.
- Wertheimer, E.** See also *E. Abderhalden*.
- Werther, F.** See *H. Lindemann*.
- Wessel, W.,** law of mass action in ionised systems, ii, 659.
- Wessely, F.,** protein studies. III. Decomposition of silk fibroin by fermentation, i, 696.
- Wesson, L. G.,** isolation of arachidonic acid from brain-tissue, i, 902.
- West, A. P., and A. I. de Leon,** oxidation of lumbang and linseed oils and of the principal compounds in lumbang oil, i, 488.
- West, R. W.,** quantitative reduction by hydriodic acid of halogenated malonyl derivatives. III. Mechanism of the reaction, i, 489.
action between bromine and malonic acid in aqueous solution, i, 939.
- West, W.** See *E. B. Ludlam*.
- Westgren, A., and G. Phragmén,** the structure of solid solutions, ii, 146.
- Westrip, G. M.,** hydrogen overvoltage of zinc, ii, 666.

- Wetselaar, D. J. K.**, ash determination by aid of oxygen, ii, 276.
- Wetselaar, G. A.**, table for the determination of sugar in blood, ii, 280.
- Weussmann, H.** See *W. Borsche*.
- Wever, F.** See *R. Fricke*.
- Wewers, H.**, detection of ethyl phthalate, ii, 574.
- Weygand, C.**, isomeric *p'*-methylchalcones [*p*-tolyl styryl ketones], i, 521.
- Weymouth, L. E.** See *R. H. Dalton*.
- Wha, C.**, behaviour of calcium, potassium, chlorine, and phosphorus in milk and the technique of ultrafiltration, i, 458.
- Wheatley, A. H. M.** See *R. V. Stanford*.
- Wheeler, R. V.**, ignition of gases. III. Ignition by the impulsive electrical discharge; mixtures of paraffins with air, ii, 747.
- Wheeler, R. V.** See also *W. Mason*.
- Wheeler, T. S.**, and *E. W. Blair*, the oxidation of hydrocarbons with special reference to the production of formaldehyde. V. The slow oxidation of the higher liquid, saturated hydrocarbons, i, 138.
- Wheeler, T. S.** See also *E. W. Blair*.
- Wherry, E. T.**, active acidity of soils, i, 927.
- Wherry, E. T.** See also *J. Davidson*.
- Whetham, M. D.** See *J. H. Quastel*, and *M. Stephenson*.
- White, A.** See *E. I. Fulmer*.
- White, E. C.**, and *R. C. Tolman*, colorimeter for corrosive gases, ii, 868.
- White, F. D.** See *G. Barger*.
- White, G. F.**, *A. B. Morrison*, and *E. G. E. Anderson*, reactions of strongly electropositive metals with organic substances in liquid ammonia solution. V. Syntheses of oxygen and sulphur ethers and of alkyl derivatives of ammoniacs, i, 726.
- Whitehead, H. R.**, bacterial nutrition. II., i, 1385.
- Whiteley, M. A.** See *A. Plowman*.
- Whitesell, W. A.**, and *J. C. W. Frazer*, manganese dioxide in the catalytic oxidation of carbon monoxide, ii, 114.
- Whiting**, inorganic substances, especially aluminium, in relation to the activities of soil micro-organisms, i, 928.
- Whitner, T. C.**, *jun.*, reduction products of 1-nitro- and 3-nitro-carbazole, i, 1344.
- Whittaker, H.** See *W. J. Powell*.
- Wibaut, J. P.**, and *G. M. Kraay*, action of bromine on 2-aminopyridine, i, 82.
- Wichers, E.**, separation of rhodium from platinum, ii, 706.
- Wichers, E.** See also *W. H. Swanger*.
- Wick, F. G.**, effect of pressure on optical absorption, ii, 287.
- spectroscopic study of the cathodoluminescence of fluorite, ii, 714.
- Widdows, S. T.**, calcium content of the blood during pregnancy. II., i, 896.
- Widdowson, W. P.**, and *A. S. Russell*, radioactive disintegration series. II., ii, 649.
- Widmark, E. M. P.**, and *N. V. Bildsten*, elimination of methyl alcohol and the conditions for its accumulation, i, 1137.
- Widmark, G.**, proteolytic enzymes in the thymus, i, 792.
- Widmer, A.** See *P. Karrer*.
- Widmer, C.** See *R. Eder*.
- Widmer, G.**, fractional distillation of small quantities, ii, 234.
- Widmer, R.** See *P. Karrer*.
- Widmer, W.** See *H. Staudinger*.
- Wiedbrauck, E.** See *R. Lorenz*.
- Wiederkehr, F.** See *H. Rupe*.
- Wieland, H.**, [physiological] action of acetylene. IV. Critical remarks on the action of acetylene, i, 123.
- Wieland, H.** [with *B. Flaschenträger*, and *A. Rewolle*], bile acids. XVIII. Cholepidanic acid, i, 857.
- Wieland, H.** [with *A. Wingler, R. Lörenskiöld*, and *H. Rau*], mechanism of oxidation processes. VII., i, 606.
- Wieland, H.** [with *A. Wingler*, and *H. Rau*], mechanism of oxidation processes. VI., ii, 35.
- Wieland, H.**, and *F. Bergel*, mechanism of oxidation processes. VIII. Scission by oxidation of amino-acids, i, 1172.
- Wieland, H.**, and *W. Mothes*, bile acids. XIX. Furtheroxidation of pyrodeoxybiliaric acid, i, 858.
- Wieland, H.**, and *O. Schlichting*, bile acids. XX. Conversion to a tri-carboxylic acid, i, 857.
- Wien, M.**, the validity of Ohm's law in the case of electrolytes subjected to very strong fields, ii, 142.
- Wien, W.**, light period of atoms and the damping of spectral lines, ii, 362.
- Wienhaus, H.**, and *P. Schumm*, chemistry of the terpene group. I. Formation and transformations of verbenone and verbenol from turpentine, i, 1086.
- Wiesemann, C.** See *A. Beythien*.
- Wieshahn, A.** See *C. Amberger*.

- Wiewzchowski, Z. See L. Marchlewski.
- Wigglesworth, V. B., uric acid in the *Pteridine*: quantitative study, i, 1372.
- Wigglesworth, V. B., and C. E. Woodrow, relation between the phosphate in blood and urine, i, 344.
- Wigglesworth, V. B. See also J. B. S. Haldane.
- Wightman, E. P., A. P. H. Trivelli, and S. E. Sheppard, dispersity of silver halides in relation to their photographic behaviour, ii, 410.
- Wigner, E. See H. Mark.
- Wigren, N. I., compounds of the diethylarsine series, i, 888.
- Wijk, D. J. R. van, determination of nitrates in soil, ii, 566.
- Wijkman, N., fungal product, $C_6H_8O_4$, and its behaviour on hydration, i, 463.
- Wilcoxon, F. See G. B. L. Smith.
- Wildman, E. A., calcium *o*-benzyloxybenzoate, i, 641.
- Wilens, G. See F. P. Underhill.
- Wilhelmi, O. See W. Madelung.
- Wilk, H. See J. Meyer.
- Wilke, H. See E. Wedekind.
- Wilke-Dörfurt, E., precipitation of magnesium as phosphate from solutions containing tartaric acid in the presence of aluminium, ii, 701.
- Wilke-Dörfurt, E., and E. Locher, use of filter-paper pulp in analysis, ii, 775.
- Wilke-Dörfurt, E., and U. Rhein, gravimetric determination of copper, ii, 785.
- Wilken, D. See F. Krauss.
- Wilkendorf, R., and M. Trénel, aliphatic nitro-alcohols. II., i, 362.
- Wilkins, E. M. See R. C. Menzies.
- Wilkins, L., and B. Kramer, the potassium content of human serum, i, 114.
- Wilkinson, J. A. See M. Frankert.
- Wilkinson, J. F., and F. Challenger, organo derivatives of bismuth. VII. Iodo- and nitro-derivatives of triphenylbismuthine, i, 675.
- Willaman, J. J., and F. R. Davison, modifications of the picric acid method for sugars, ii, 789.
- Willaman, J. J., C. A. Morrow, and A. K. Anderson, resistance to disease in plants, i, 1276.
- Willaman, J. J. See also A. K. Anderson.
- Willard, M. L., rate of diazotisation of amines, i, 1003.
- Williams, A. M. See E. D. Eastman.
- Williams, E. H. See J. Kunz.
- Williams, F. A. See J. R. Partington.
- Williams, G. A., and J. B. Ferguson, solubility of helium and hydrogen in heated silica glass and the relation of this to the permeability, ii, 325.
- Williams, J. L., and J. A. Bargaen, uric acid content of human amniotic fluid, i, 1256.
- Williams, J. W., and F. Daniels, specific heats of certain organic liquids at elevated temperatures, ii, 450.
- irregularities in the specific heats of certain organic liquids, ii, 589.
- Williams, P. N. See D. D. Pratt, and R. Robinson.
- Williamson, F. S., sodium alizarate and alumina, i, 1080.
- basic copper sulphate, ii, 47.
- Williamson, R. C., analysis of resonance curves observed in potassium vapour, ii, 646.
- Williamson, R. V. See J. H. Mathews.
- Wills, A. P., and L. G. Hector, magnetic susceptibility of oxygen, hydrogen, and helium, ii, 293.
- Willstätter, R., and W. Duisberg, trichloro- and tribromo-ethyl alcohols, i, 3.
- Willstätter, R., and W. Grassmann, activation of papain by hydrocyanic acid, i, 1146.
- Willstätter, R., and H. Kraut, hydrates and hydrogels. III. Aluminium hydroxides poor in water, ii, 263.
- hydrates and hydrogels. V. Hydroxides and their hydrates in the different aluminium hydroxide gels, ii, 615.
- Willstätter, R., H. Kraut, and W. Fremery, hydrates and hydrogels. IV. Stannic acids, ii, 266.
- hydrates and hydrogels. VI. The simplest stannic acids, ii, 767.
- Willstätter, R., R. Kuhn, and H. Sobotka, relative specificity of yeast maltase, i, 919.
- Willstätter, R., and F. Memmen, pancreatic enzymes. VI. Effect of lipase on different substrates, i, 695.
- pancreatic enzymes. VII. Comparison of gastric lipase with pancreatic lipase, i, 695.
- comparison of liver esterase with pancreatic lipase; stereochemical specificity of lipases, i, 1144.
- Willstätter, R., and K. Schneider, invertase. V., i, 692.
- Willstätter, R., and F. Seitz, hydrogenation of aromatic compounds with the aid of platinum. VII. Decahydronaphthalene prepared using platinum black, i, 628.

- Willstätter, R.**, and **K. Sjöberg**, zinc and copper compounds of phaeophytin, i, 1154.
- Willstätter, R.**, and **E. Waldschmidt-Leitz**, pancreatic enzymes. V. Enterokinase and the tryptic action of the pancreas, i, 473.
- lipase of the castor oil bean, i, 919.
- Willstätter, R.**, **O. Wolfes**, and **H. Mäder** [with **R. Gottlieb**, **H. Stienmetz**, and **F. Müllbauer**], synthesis of natural cocaine, i, 70.
- Wilson, D. W.** See **H. S. Everett**.
- Wilson, E.**, and **E. F. Herroun**, electrical conductivity of magnetite, ii, 293.
- Wilson, F. J.**, and **W. McN. Hyslop**, application of the Grignard reaction to some acetylenic compounds. II., i, 1063.
- Wilson, F. J.**, and **R. M. Macaulay**, stereoisomeric semicarbazones, i, 652.
- Wilson, F. J.**, and **E. C. Pickering**, derivatives of semioxamazine. II., i, 716.
- Wilson, H. A.**, and **A. B. Bryan**, conductivity of [salted] flames for rapidly alternating currents, ii, 291.
- Wilson, J. A.**, and **E. J. Kern**, points of minimum swelling of ash-free gelatin, i, 232.
- Wilson, M. L.** See **R. D. Haworth**.
- Wilson, R. E.**, and **W. H. Bahlke**, physical properties of the paraffin hydrocarbons, i, 357.
- Wilson, R. S.** See **F. Fenger**.
- Wilson, W. J.**, reduction of sulphites by certain bacteria in media containing a fermentable carbohydrate and metallic salts, i, 125.
- Winchester, J.** See **C. E. Hazeldine**.
- Windaus, A.**, constitution of colchicine, i, 1089.
- Windaus, A.** [with **O. Dalmer**, **H. Schreiterer**, **R. Hupe**, and **H. Köcher**], derivatives of ac-tetrahydro- β -naphthylamine, i, 1301.
- Windaus, A.**, and **A. Bohne**, hyoglycodeoxycholic acid and hyodeoxycholic acid, i, 47.
- Windaus, A.**, **A. Bohne**, and **A. Schwieger**, *Digitalinum verum*. II., i, 1215.
- Windaus, A.**, and **H. Schiele**, constitution of colchicine, i, 72.
- Windhausen, O.** See **R. Fricke**.
- Winegarden, H. M.** See **G. A. Alles**.
- Wingler, A.** See **H. Wieland**.
- Winkler, L. W.**, analysis of alkali bromides, ii, 272.
- Winkler, L. W.**, determination of copper as cuprous iodide, ii, 276.
- determination of mercury as mercurous chloride and as metal, ii, 627.
- Winkler, P.** See **J. Sigrist**.
- Winspeare, G.** See **G. Canneri**.
- Winter, A. R.** See **C. H. Hunt**.
- Winter, L. B.**, and **W. Smith**, is the pentose of the nucleotides formed under the action of insulin? i, 104.
- carbohydrate metabolism. I. Variations in the nature of the blood-sugar, i, 1365.
- Winter, L. B.** See also **H. B. Hutchinson**.
- Winterfeld, K.** See **J. Gadamer**.
- Winterhalder, L.** See **A. Skita**.
- Wintersteiner, O.**, micro-determination of sulphur, ii, 777.
- Wintersteiner, O.** See also **H. Lieb**.
- Wintgen, R.**, and **M. Biltz**, composition of micellæ. II. Colloidal iron oxide, ii, 156.
- Wintgen, R.**, and **H. Löwenthal**, composition of micelles; colloidal chromium oxide, ii, 534.
- mechanism of reciprocal precipitation of colloids, ii, 535.
- dependence of reciprocal precipitation of gelatin and colloidal chromic oxide hydrosols on the equivalent aggregation of the chromic oxide micelle; contribution to the theory of chrome tanning, ii, 739.
- precipitation of colloidal gold by colloidal chromic oxide, ii, 739.
- Wintgen, R.** See also **A. Ehringhaus**.
- Winther, C.**, oxidation of hydrogen iodide in the dark and in the light, ii, 329.
- Wischo, F.**, examination of ether for anæsthetic use, ii, 706.
- Wislicenus, W.**, and **H. Bubeck**, ester condensations with ethyl *o*-aminophenylacetate and oxindole, i, 419.
- Wislicenus, W.**, **G. Butterfass**, and **G. Koken** [with **H. Eichert**, **M. Marquardt**, and **H. Riethmüller**], condensations in the arylacetonitrile series. I. Formyl- α -naphthylacetonitrile, ethyl formyl- α -naphthylacetate, and ethyl α -naphthylloxalacetate. II. Formyl- β -naphthylacetonitrile and ethyl formyl- β -naphthylacetate. III. Ester condensations with benzyl cyanide, i, 395.
- Wislicenus, H.**, and **W. Gierisch**, colloid chemistry of cellulose, ii, 312.

- Wislicenus, W.**, and **W. Hentrich** [with **G. Manthe**, and **K. Pfeilsticker**], studies in the indene series. I. Derivatives of indeneglyoxylic ester and of indene-1-carboxylic acid [indene-3-carboxylic acid]. II. Indene-3-carboxylic acid. III. 1-Nitroindene, i, 392.
- Wislicenus, W.**, and **F. Melms**, ring syntheses with ethyl oxalate, i, 403.
- Wislicenus, W.**, and **E. Thoma** [with **E. Mundinger**, and **F. Schultz**], condensation of ethyl oxalate with nitrotoluenes. I. *o*-Nitrotoluene. II. Condensation of ethyl oxalate and *p*-nitrotoluene. III. Condensation of ethyl oxalate and 1-nitro-2-methylnaphthalene, i, 389.
- Wislicenus, W.**, and **H. Weitmeyer**, fluorene- and 2-nitrofluorene-9-glyoxylic esters, i, 398.
- Wisniewski, F. J. von**, theory of the helium atom, ii, 361.
the *p*- and *d*-terms of lithium, ii, 637.
excitation limit of *K*-series of light elements, ii, 639.
- Wisebach, H.** See **F. Schütz**.
- Wistinghausen, L. von.** See **E. Weitz**.
- Withrow, L. L.** See **J. H. Walton**.
- Wittig, G.**, syntheses of chromones and coumarins, i, 412.
- Wittig, G.** See also **K. von Auwers**.
- Witzemann, E. J.**, action of guanidine on dextrose in the presence and absence of oxygen, i, 614.
leucoplasts: living, reproducing, perfect chemical catalysts, ii, 400.
- Witzemann, E. J.**, and **L. Livshis**, action of proteolytic enzymes on insulin, i, 108.
action of ammonium hydroxide and other alkaline compounds on insulin, i, 448.
- Wöhler, L.**, and **O. Bock**, silicon analogue of calcium cyanamide, ii, 473.
- Wöhler, L.**, and **L. Metz**, detection of ruthenium and osmium, ii, 874.
- Wöhlisch, E.**, action of thrombin. IX. Blood clotting, i, 681.
theory of the action of thrombin, i, 1013.
- Wöhlisch, E.**, and **K. Paschkis**, specific rôle of calcium in the formation of thrombin, i, 1013.
- Wöhlk, A.**, titrimetric determination of aluminium in aluminium salts, in particular in "liquor aluminii acetici," ii, 63.
- Wohl, K.**, atomic dissociation of hydrogen and chlorine. II. Dissociation of hydrogen, ii, 600.
- Wohlgemuth, J.**, and **T. Koga**, colloids in the urine and the blood, i, 795.
- Wolber, A.** See **A. Benrath**.
- Woldman, N. E.** See **R. H. McKee**.
- Wolf, A.** See **S. Goldschmidt**.
- Wolf, C. G. L.** See **E. K. Rideal**.
- Wolf, F. A.**, fermentation of rare sugars by plant pathogenic bacteria, i, 1014.
- Wolf, H.**, and **E. Heymann**, test for nitric acid and nitrates, ii, 423.
- Wolf, H.** See also **F. L. Hahn**.
- Wolfel, E.** See **E. Diepolder**.
- Wolfes, O.** See **R. Willstätter**.
- Wolff, A.** See **M. Battagay**.
- Wolff, F.**, poisoning of nickel catalysts, ii, 467.
- Wolff, G.** See **H. P. Kaufmann**.
- Wolff, H.**, fatty and resin oxy-acids and their analytical separation, ii, 507.
- Wolff, H.** See also **K. Fajans**.
- Wolff, O.**, optical determination of starch in technical starch products and in parts of plants by means of the interferometer, ii, 506.
- Wolfenstein, R.**, preparation of a derivative of hexamethylenetetramine, i, 1049.
- Wolffhardt, E.** See **S. Goldschmidt**.
- Wolfram, A.** See **W. Steinkopf**.
- Wolfram, J.** See **R. Strebing**.
- Wolfsohn, K.** See **H. Fringsheim**.
- Wollman, E.**, **V. Labernadie**, (*Mme.*) **E. Wollman**, and (*Mlle.*) **J. Ostrowski**, reaction of *Bacillus coli* applied to the proteolytic action of serum (Abderhalden's "ferments of defence"), i, 595.
- Wollman, (Mme.) E.** See **E. Wollman**.
- Wolpe, G.**, amino-acids in physiological fluids, i, 1259.
- Wolter, R.** See **S. Gabriel**.
- Woltjer, H. R.**, magnetic researches. XXII. Determination of magnetisation [magnetic susceptibility] at very low temperatures, and the susceptibility of gadolinium sulphate in the region of temperatures attainable with liquid hydrogen, ii, 16.
- Woltjer, H. R.**, and **H. K. Onnes**, magnetic researches. XXIII. The magnetisation of gadolinium sulphate at temperatures attainable with liquid helium, ii, 16.
- Wonnensch, M.** See **G. P. Pamfil**.
- Wood, F. M.**, chemical nature of the cellulose membrane, i, 812.
- Wood, J. K.** See **C. Lea**, and **A. M. Morley**.
- Wood, L.** See **H. V. Tartar**.
- Wood, R. W.**, and **A. Ellett**, polarised resonance radiation [of sodium and mercury] in weak magnetic fields, ii, 715.

- Woodhouse, J. C.** See *L. B. Richardson*.
- Woodman, H. E.**, critical note on method of correcting protein digestion coefficients, i, 1156.
determination of uric acid in poultry excreta, ii, 794.
- Woodrow, C. E.** See *D. L. Foster, J. B. S. Haldane, and V. B. Wigglesworth*.
- Woods, H. K.** See *D. F. Smith*.
- Woodward, I.**, calculations of the potential energy for some atomic models, ii, 448.
- Woolfolk, C. M.** See *L. C. Raiford*.
- Worley, F. P.**, atomic structure and the relationship of the chemical elements, ii, 298.
- Woronin, N.** See *P. P. Fedotsev*.
- Worrall, D. E.**, action of hydroxylamine and of hydrazine on the aryl monothioamides of carbethoxyethylmalonate, ii, 208.
- Worthing, A. G.**, spectral emissive power and melting point of tungsten, ii, 289.
atomic heats of tungsten and carbon at incandescence temperatures, ii, 865.
- Wortmann, R.** See *H. Meerwein*.
- Wouseng, S.**, action of acetylene on sodium compounds of ketones; isomeric transformation of dialkylvinylcarbinols into $\beta\beta$ -dialkylallyl alcohols, i, 823.
- Wouseng, S.** See also *R. Locquin*.
- Wrede, F.**, spermine. III, i, 1135.
- Wrede, F.**, and *E. Banik*, spermine. I. The base isolated from cholera cultures by Kunz, i, 77.
spermine. II. The base isolated by Schreiner from sperm, i, 78.
- Wren, H.**, and *R. E. Burrows*, phenylsuccinic acid series. VIII. Resolution of *r*-diphenylsuccinanilic and *r*-diphenylsuccino-*p*-toluidic acids into their optical antipodes, i, 1196.
- Wright, F. R.** See *R. S. Hubbard*.
- Wright, L. H.**, iron content of the blood and spleen in infectious equine anæmia, i, 343.
- Wright, N. C.**, action of rennet and of heat on milk, i, 590.
- Wright, R.**, selective solvent action by the constituents of aqueous alcohol. III. Effect of some water-soluble semi-solutes, ii, 838.
- Wüdicke, W.**, the constitution of the so-called β -dimethylisothiohydantoin, i, 21.
- Wulfken, F.** See *A. Thiel*.
- Würzburger, H.** See *A. Benrath*.
- Wulff, C.** See *O. Diels*.
- Wulwek, W.** See *E. Glaser*.
- Wunderly, K.**, hydrolysis of amino-acids in presence of charcoal, ii, 841.
- Wurdack, M. E.**, chemical composition of the walls of certain algae, i, 127.
- Wurmser, R.** See *M. Gompel*.
- Wurth, K.**, apparatus for fractional distillation under reduced pressure, ii, 540.
- Wussow, R.**, relation between the diffusion of a gas mixture and its pressure, ii, 307.
- Wustrow, W.** See *K. Hess*.
- Wuyts, H.**, application of azeotropy to the preparation of organic compounds, i, 710.
- Wynne-Jones, W. F. K.**, and *L. J. Hudleston*, activity of hydrogen-ion in aqueous solutions of hydrogen fluoride, ii, 470.
- Wyon, G. A.**, and *J. W. McLeod*, inhibition of bacterial growth by amino-acids, i, 124.

Y.

- Yabusoe, M.** See *O. Warburg*.
- Yabuta, T.**, the constitution of kojic acid, a γ -pyrone derivative formed by *Aspergillus oryzae* from carbohydrates, i, 537.
- Yajnik, N. A.**, and *S. J. Kohli*, radioactivity of some Indian minerals, ii, 620.
- Yajnik, N. A.**, and *T. C. Rana*, adsorption of binary mixtures by animal charcoal and a comparative study of the adsorptive power of different varieties of charcoal, ii, 308.
- Yajnik, N. A.**, and *B. R. Sobti*, molecular conductivity of potassium iodide in epichlorohydrin, i, 133.
molecular conductivity of potassium iodide in organic solvents, ii, 591.
- Yajnik, N. A.**, and *R. L. Uberoy*, viscosities of solutions containing mixtures of mercuric, cupric, and cobaltous chlorides with other chlorides; formation of complex ions, ii, 411.
- Yamada, M.**, surface energy of crystals and crystal form, ii, 298.
relation between crystal habit and crystal lattice, ii, 650.
- Yamagawa, M.** See *P. A. Levene*.
- Yamagishi, I.** See *Y. Murayama*.
- Yamaguchi, S.**, synthesis of 2:4:7- and 2:4:8-trimethylquinolines, i, 667.
Beckmann's rearrangement. XII. Catalytic action of reduced copper on acetophenoneoxime, i, 1078.

- Yamaguchi, Y.**, the anthocyanin pigment of *Ipomoea hederacea*, i, 1045.
- Yamamoto, R.**, and **M. Sumi**, insecticidal principle in *Chrysanthemum cinerariaefolium*. IV. Insecticidal principle produced on dry distillation of *Chrysanthemum cinerariaefolium*, i, 1151.
- Yamasaki, Y.**, enzymes of the skin, i, 1145.
- Yanagi, K.**, colorimetric determination of carbamide with urease, ii, 708.
- Yang, K. H.** See **A. Rosenheim**.
- Yant, W. P.** See **R. R. Sayers**.
- Yarborough, J. H.** See **H. D. Bergman**.
- Yardley, K.**, crystalline structure of succinic acid, succinic anhydride, and succinimide, ii, 382.
- Yardley, K.** See also **W. T. Astbury**.
- Yee, J. Y.**, and **H. J. Krase**, determination of calcium carbide, ii, 784.
- Yee, J. Y.** See also **H. J. Krase**.
- Yilner, C. A.**, purification, and identification by micro-analysis, of vegetable poisons isolated from bodies, ii, 794.
- Yntema, L. F.**, rare earths. XV. Search for element sixty-one, ii, 185.
- Yoe, J. H.**, reduction of certain vat dyes by means of alkaline sodium hyposulphite, i, 1350.
- Yoshida, R.** See **Y. Osaka**.
- Yoshimura, K.**, and **S. Fujise**, constituents of *Astragalus sinicus*, L., i, 1273.
- nitrogenous compounds in the oil cake of *Brassica campestris*, var. *Chinensis*, T. Ito, i, 1275.
- Yoshimura, K.**, and **K. Nishida**, constituents of the tomato. I., i, 1274.
- nitrogenous compounds in pumpkin and cucumber, i, 1274.
- Yoshino, M.**, starch paste. I. Relation between the viscosity of wheat starch paste and the concentration and temperature, i, 142.
- Yoshiue, S.**, nitrogen metabolism in avitaminosis, i, 1128.
- Young, A. F. A.**, thermionic and photo-electrical properties of the electro-positive metals, ii, 86.
- Young, A. G.**, and **A. S. Loevenhart**, relation of the chemical constitution of certain organic arsenical compounds to their action on the optic tract, i, 689.
- Young, A. G.**, and **C. W. Muelhberger**, excretion of tryparsamide, i, 1259.
- Young, J. B.** See **W. H. MacIntire**.
- Young, T. F.** See **E. D. Eastman**.
- Youngburg, G. E.**, and **G. W. Pucher**, pentose metabolism. I. Colorimetric determination of furfuraldehyde, ii, 876.
- Youtz, M. A.**, depolarisation of the chlorine electrode by organic compounds, ii, 318.
- Yovanovitch, D.**, apparatus for measuring the heat liberated by radioactive substances, ii, 719.
- Yovanovitch, D.**, and **J. d'Espine**, magnetic spectrum of β -rays of mesothorium-2, ii, 447.
- Yung, C. C.** See **R. N. Pease**.

Z.

- Zacharias, P. D.**, rhythmic formation of layers; Liesegang's phenomenon, ii, 307.
- Zacharias, R.** See **H. Handovsky**.
- Zadek, F.** See **D. Holde**.
- Zaher, M. W.** See **T. Sabalitschka**.
- Zahn, C. T.**, electric moment of gaseous molecules of hydrogen halides, ii, 809.
- Zakarias, L.**, "polydyn" filter, which can be heated to redness, suitable for membrane filtration (ultrafiltration) and quantitative analysis, ii, 622.
- Zalkind, J.**, and **A. Rosenfeld**, magnesium acetylenyl bromide, i, 1291.
- Zambonini, F.**, normal thorium molybdate, $\text{Th}(\text{MoO}_4)_2$, ii, 267.
- atomic structure according to Bohr and isomorphogenism of metals of the rare earths with those of the calcium group, ii, 816.
- Zambonini, F.**, and **G. Carobbi**, Baskerville and Catlett's lanthanates, ii, 261.
- double carbonates of sodium and metals of the cerium group, ii, 261.
- presence of the compound, $\text{K}_2\text{Mn}_2(\text{SO}_4)_3$, among the products of the present activity of Vesuvius, ii, 867.
- Zamparo, A.**, reaction of resorcinol and of phloroglucinol with formaldehyde, i, 638.
- Zanardi-Lamberti, B.** See **G. Ponzio**.
- Zande, J. E. van der.** See **B. Sjollesma**.
- Zander, H.** See **W. Traube**.
- Zanella, B.**, supposed phosphorescence in phototropic transformations, ii, 467.
- Zawidzki, J.**, chemical dynamics of autocatalysed reactions. V. Velocity of isomeric change of the alkyl phosphites, ii, 401.
- Zawidzki, J.**, and **J. Zaykowski**, chemical dynamics of auto-catalysed reactions. VI. Velocity of saponification of potassium alkylsulphates, ii, 401.

- Zaykowski, J.**, action of chymosin on the proteins of milk. I. Action of chymosin on colostrum, i, 806.
- Zaykowski, J.** See also **J. Zawadzki**.
- Zeeman, P.** See **T. L. de Bruin**, **H. W. J. Dik**, and **S. Goudsmit**.
- Zeisel, S.**, and **M. Neuwirth**, α -vinylcrotonaldehyde and, presumably, sorbic aldehyde [$\Delta\gamma$ -hexadienaldehyde] from acetaldehyde, i, 12.
- Zeleny, J.**, discharges from points in gases, and so-called dark discharges, ii, 715.
- Zelinski, N. D.**, contact condensation of acetylene, i, 359.
metallisation of organisms, ii, 46.
- Zelinski, N. D.** [with **A. Tschuksanova**], chemical nature of the naphthenic acids. I., i, 386.
- Zelinski, N. D.**, and **P. Borisov**, catalytic hydrogenation of pyridine, i, 421.
- Zelinski, N. D.**, and **W. Kommarevski**, catalytic actions of nickelised aluminium hydroxide, ii, 400.
- Zelinski, N. D.**, and **M. Ouchakov**, 0:1:3-dicyclohexane, i, 842.
- Zelinski, N. D.**, and **G. Pavlov**, kinetics of catalytic dehydrogenation. II., i, 665.
reversible catalysis of unsaturated hydrocarbons. I., i, 952.
- Zelinski, N. D.**, and **E. Pokrovskaja**, chemical nature of the naphthenic acids. II., i, 387.
- Zelinski, N. D.** See also **W. S. Sadikov**.
- Zellinger, V.** See **C. Schwarz**.
- Zellner, J.**, comparative plant chemistry. VII. *Knaulia silvatica*, i, 816.
- Zellner, J.** See also **J. Einleger**, and **C. Feinberg**.
- Zeltner, J.** See **Neumann & Co.**
- Zemanec, V.** See **J. Beška**.
- Zemplén, G.**, synthesis of amygdalic acid from gentiobiose, i, 617.
- Zemplén, G.**, and **A. Kunz**, amygdalin. III. *l*-Amygdalinic acid, i, 975.
amygdalin. III. Synthesis of natural *l*-amygdalin, i, 1215.
- Zenzén, N.**, crystallographic investigation of *p*- $\beta\beta$ -dimethylpropylbenzenesulphanilide and benzyltrimethylsilicane-*p*-sulphanilide, i, 631.
- Zerbe, C.** See **F. Fischer**.
- Zerkowitz, A.**, experiments demonstrating the existence of specific cytolytins for the various organs of the animal organism, i, 352.
- Zerweck, W.** See **H. Fischer**.
- Zetsche, F.**, **G. Vieli**, **G. Lilljeqvist**, and **A. Loosli**, formation and ageing of written characters; the primary ink-salts of iron inks, i, 401.
- Zeutzius, J.** See **A. Benrath**.
- Ziegenspeck, H.**, a substance giving a blue colour with iodine in the asci of lichens (*isolichenin*), i, 1047.
- Ziegler, K.** [with **G. Bremer**, **F. Thiel**, and **F. Thielmann**], "tervalent" carbon. I. The tetra-arylallyl radicals and their derivatives, i, 308.
- Ziegler, K.**, and **B. Schnell**, tervalent carbon. II. Conversion of the ethers of tertiary alcohols into organic potassium compounds and hexa-substituted ethane derivatives, i, 850.
- Ziegler, K.**, and **F. Thielmann**, [alkali metal as a reagent for weakened valencies in organic compounds], i, 160.
- Ziegler, K.**, and **K. Tripp**, methyl ether of diphenylphenylacetylenylcarbinol, i, 509.
- Zies, E. G.** See **N. A. Bowen**.
- Zilva, S. S.**, antiscorbutic fraction of lemon juice. I. and II., i, 588, 901.
conservation of the potency of concentrated antiscorbutic preparations. II., i, 588.
stability of the vitamin-A of cod-liver oil towards the hardening process, i, 1388.
- Zilva, S. S.**, **J. C. Drummond**, and **M. Graham**, relation of vitamin-A potency of the liver oil to the sexual condition and age of the cod, i, 587.
- Zilva, S. S.**, **J. Golding**, **J. C. Drummond**, and **V. Korenchevski**, relation of the fat-soluble factor to rickets and growth in pigs. III., i, 1375.
- Zilva, S. S.** See also **S. J. B. Connell**, **A. Harden**, and **H. D. Kay**.
- Zimmermann, J.** See **I. Lifschitz**.
- Zinke, T.**, action of nitric acid and nitrogen peroxide on tetrachloro- and tetrabromo-pyrocatechol and the corresponding quinones, i, 163.
- Zinke, T.**, and **E. Weishaupt**, 3:3:5:6-tetrachloro- and -tetrabromo-1:2:4-triketocyclohexenes, i, 751.
- Zinke, A.**, **A. Erben**, and **F. Jele**, constituents of resins. X. Pinoresinol and the natural resin of pine, i, 1088.
- Zinke, A.**, and **A. Pongratz**, perylene and its derivatives. V., i, 1081.
- Zinke, A.**, and **H. Schöpfer** [with **G. Müller**, **R. Sabathy**, **M. Schneider**, and **W. Spitz**], perylene and its derivatives. IV., i, 1080.
- Zintl, E.** and **A. Meuwesen**, some fundamental atomic weights, ii, 608.
- Zintl, E.**, and **A. Baach**, theory of constitutive colour, ii, 806.
- Zintl, E.** See also **O. Hönigschmid**.
- Zizine, P.** See **A. Chaffard**.
- Zlámál, J.** See **E. Příbýl**.

- Zobel, F.** See *J. von Braun*.
Zöllner, C. See *M. Dohrn*.
Zschacke, F. H. See *H. Ley*.
Zsigmondy, R., structure and composition of soap gels, ii, 391.
state of division of dyes of high molecular weight in aqueous solution, ii, 656.
- Zucker, T. F., and M. Gutman**, distribution of phosphorus in the blood, i, 112.
Zühlke, E. See *O. Gerngross*.
Zütphen, L. van. See *F. Mayer*.
Zuverkalov, D. See *A. Palladin*.
Zyl, G. van. See *A. L. Ferguson*.